9DIA

Terry Sterman, Proprietor

AMATEUR ELECTRONIC SUPPLY

1970 Amateur Radio Catalog

★ NAME BRANDS

★ LARGE STOCKS

★ FAST SERVICE

★ BEST DEALS

★ E–Z TERMS

TOP TRADES *plus*
STAY ON THE AIR PLAN
★

Order by MAIL
—or—
VISIT our Store

AMATEUR ELECTRONIC SUPPLY

4828 West Fond du Lac Avenue
Milwaukee, Wisconsin 53216
PHONE (414) 442-4200

STORE HOURS: Mon & Fri - 9 am to 9 pm;
Tues, Wed, Thurs - 9 am to 5:30 pm; Sat -
9 am to 3 pm

BONUS A - SAVE $5

If you purchase any new equipment with BONUS A indicated for the regular price, with no trade-in, you may take a $5.00 credit toward the purchase of any other merchandise in this catalog.

BONUS B - SAVE $10

If you purchase any new equipment with BONUS B indicated for the regular price, with no trade-in, you may take a $10.00 credit toward the purchase of any other merchandise in this catalog.

BONUS C - SAVE $25

If you purchase any new equipment with BONUS C indicated for the regular price, with no trade-in, you may take a $25.00 credit toward the purchase of any other merchandise in this catalog.

BONUS D - SAVE $50

If you purchase any new equipment with BONUS D indicated for the regular price, with no trade-in, you may take a $50.00 credit toward the purchase of any other merchandise in this catalog.

SAMPLE

ORDER BLANK

AMATEUR ELECTRONIC SUPPLY
4828 W. FOND DU LAC AVENUE
MILWAUKEE, WIS. 53216
PHONE (414) 442-4200

IMPORTANT! — Persons having a TRADE-IN must also complete the reverse side of this Order Blank.

SHIP THIS ORDER VIA: ☐ PARCEL POST ☐ AIR MAIL ☐ UNITED PARCEL ☒ REA ☐ AIR EXPRESS ☐ TRUCK OTHER:

IMPORTANT – If this order is to be shipped via Parcel Post, Air Mail, or United Parcel Service, be sure to enclose enough for Postage – excess amounts will be promptly refunded. DO NOT remit for R.E.A. Air Express, or Truck shipping charges – they will be collected upon delivery. Before specifying United Parcel, please check the UPS map (on reverse side of this Order Blank) for the states served from Milwaukee. Amateur Electronic Supply reserves the right to ship best way if, in our opinion, the method of shipment indicated is unsatisfactory.

Please type or print clearly:

SOLD TO: Name LAVERNE T. KILLION Address 1240 IRVING ST. City & State LINCOLN, NEBRASKA Zip Code 68508

DATE: 5-14-69 Call KØEFB

You may telephone me at: (Be sure to show area codes)
Home # 402-435-5804 Hours: 6AM TO 8AM
Work # 402-435-9160 Hours: 9AM TO 5PM

SHIP TO: (if other than at left)

IF YOU HAVE MOVED since your last order, please show your old address below:

QTY.	DO NOT USE	MANUFACTURER - PART OR MODEL # - DESCRIPTION	PRICE EACH	TOTAL
1		SWAN 260 CYGNET TRANSCEIVER		435.00
1		HYGAIN 14AVQ ANTENNA		35.95
1		HYGAIN 14RMQ ROOF MOUNTING KIT		16.95
100'		BELDEN 8214 FOAM COAX	16¢/FT.	16.00
4		PL-259 COAX CONNECTORS	.59	2.36

LINE 1 – Total amount of order..... $506.26
LINE 2 – Subtract here Bonus Credits, Coupons, Discounts, or Special Allowances, etc. (if any)..... - 50.00
LINE 3 – Subtract Trade-In Allowance (if any)..... -
Enclose our original quotation, and list the items you are trading below.

IMPORTANT! Persons having a Trade-In must also complete the reverse side of this order blank!

LINE 4 – Balance..... $456.26
LINE 5 – Sales Tax (Wisconsin Residents only)..... +
LINE 6 – Due AES from previous order (if any)..... +
LINE 7 – Estimated Postage or UPS Charges & Ins.... +
LINE 8 – Total Amount Due..... $456.26
LINE 9 – Amount Enclosed (or Down Payment)... - 5.00
LINE 10 – Final Balance Due (if any)..... $451.26

Final Balance (line 10) to be paid by:
☐ C.O.D. (20% deposit required)
☒ REVOLVING CHARGE PLAN ($100.00 minimum)
☐ Add this Balance to my present Revolving Charge Plan. My Account Number is: _____ ($50.00 minimum)

Persons using our REVOLVING CHARGE PLAN must check one of the following:
☐ I have established credit with you. My credit card number is _____
☐ I have already sent you my Credit Application, on or about _____ (date)
☐ Please find enclosed my Credit Application.

order is to be shipped Parcel Post, Air Mail, or United ure to enclose enough for Postage and Insurance – will be promptly refunded. If you are using Plan, be sure to enclose at least $5.00 Enclose payment-in-full whenever ers take slightly longer to because of the extra

Show the amount of the BONUS as a credit on line 2 of the Order Blank

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Terry J. Sterman d/b/a
Amateur Electronic Supply

If you purchase more than one item qualifying for a BONUS (no trade-in) – add the BONUSES and show the total amount as a credit on Line 2 of the Order Blank.

All about our REVOLVING CHARGE PLAN

No more bulky coupon books! Once a month you receive an itemized statement showing your account transactions during that month and the minimum monthly payment required. Payments and purchases made near the billing date will be shown on your next statement.

A service charge of 1½% per month (or a minimum charge of $1.00) is added to your balance monthly. If you decide to protect your investment by taking the life and property insurance that is available, separate insurance charges are then included in your balance. On outstanding balances in excess of $1,000.00, the service charge is reduced to 1% of that portion over $1,000.

NOTE: The 1½% monthly service charge is approximately equal to an annual percentage rate of 18%. The 1% service charge on the amount over $1,000 is approximately equal to an annual percentage rate of 12%.

You control the total service charge you pay on your Revolving Charge Purchase. The total service charge depends upon how fast you pay your account in full. Because service charges are added to your account monthly rather than determined in advance, there is never any complicated refund of unused service charges...You just remit the balance shown on your billing, if you wish to pay your account in full.

Amateur Electronic Supply has established this plan for your convenience. All accounting and billing details are handled and provided for us by the General Electric Credit Corporation. For this reason, it is important that you mail your payments to the P. O. Box shown on your monthly statement.

To use our Revolving Charge Plan, an applicant must be at least 21 years of age, be a US citizen, have good credit ratings and regular full-time employment, etc. All Revolving Charge Plan Orders are subject to credit approval.

Normally, only $5.00 down is required on orders for new or reconditioned equipment, unless otherwise specified. US citizens living temporarily outside the USA (such as servicemen at APO addresses, etc.) can usually secure approval by making a more substantial down payment of at least 20%. A trade-in cannot act as a down payment. No orders can be processed without that $5.00 down to "Seal the Deal".

IMPORTANT! Shipping charges cannot be financed. If your Revolving Charge Plan Order is to be shipped via Parcel Post, Air Mail, or United Parcel Service (UPS), in addition to the $5.00 down payment required, BE SURE to include enough for postage – excess amounts will be promptly refunded. Show the amount you have allowed for postage on line 7 of the order blank. Do not remit for REA, air express or truck shipping charges – they will be collected upon delivery.

The minimum balance that can be financed (after down payment and trade-in) on our Revolving Charge Plan is $100.00. ADD-ON's of $50.00 or more can be considered after you have completed at least four monthly payments. Again, the $5.00 down payment must be enclosed with all add-on orders, to "Seal the Deal".

A one-time $2.00 "Official Fees" charge is made on your First contract when you open a Revolving Charge Account. The purpose of this is to help defray some of the expenses of: checking your credit, setting up your account, and the necessary filing fees. Once your account is open, there are no "Official Fees" charges on Add-On orders or Re-Opened accounts that have not been closed for more than six months.

LOOK at your low Monthly Payment AFTER JUST $5.00 DOWN

REVOLVING CHARGE PAYMENT CALCULATOR

Minimum monthly payment is based on original principal balance to be financed or new balance in the case of add-ons.

Balance	Minimum Monthly Payment
Up to $300.00	$10
$300.01 to 340.00	11
340.01 to 370.00	12
370.01 to 400.00	13
400.01 to 430.00	14
430.01 to 460.00	15
460.01 to 490.00	16
490.01 to 520.00	17
520.01 to 550.00	18
550.01 to 580.00	19
580.01 to 610.00	20
610.01 to 640.00	21
640.01 to 670.00	22
670.01 to 700.00	23
700.01 to 730.00	24
730.01 to 760.00	25
760.01 to 790.00	26
790.01 to 850.00	28
850.01 to 910.00	30
910.01 to 970.00	32
970.01 to 1030.00	34
1030.01 to 1060.00	35
1060.01 to 1220.00	40
1220.01 to 1400.00	45
1400.01 to 1550.00	50
1550.01 to 1700.00	55
1700.01 to 1850.00	60
1850.01 to 2000.00	65
2000.01 to 2150.00	70
2150.01 to 2300.00	75
2300.01 to 2450.00	80
2450.01 to 2800.00	90
2800.01 to 3100.00	100
3100.01 to 4000.00	125

Minimum initial REVOLVING CHARGE Order–$100

Minimum Monthly Payment–$10

Minimum ADD-ON Order–$50

AMATEUR ELECTRONIC SUPPLY
4828 W. Fond du Lac Ave. Milwaukee, Wis. - 53216 Ph. (414) 442–4200
MILWAUKEE STORE HOURS: Mon & Fri - 9 am to 9 pm – Tues, Wed, Thurs - 9 am to 5:30 pm – Sat - 9 am to 3 pm.

WHEN YOU TRADE with AMATEUR ELECTRONIC SUPPLY, you will consistently get a top deal, because AES is one of the largest distributors of Amateur Radio and CB equipment in the world – as a result, we tend to "set the pace" for the Industry. For example, the AES Reconditioned Equipment Bulletin is often used by other distributors for reference. Normally, when you have a trade-in transaction with distributors other than AES, you, as the customer, are required to pay shipping charges BOTH ways – on the new equipment to you and on your trade-in to the distributor.

AMATEUR ELECTRONIC SUPPLY will pay the collect shipping charges on your trade-ins, if you live in the USA (NOT including Alaska, Hawaii, or possessions), AND can ship via REA – see the back side of our Order Blank for details. This policy alone can save you up to $25.00 or more.

Don't go off the air when trading – use the AES STAY-ON-THE-AIR PLAN. See back side of Order Blank.

TRADE-IN QUOTES (verbal or written) are usually good for about 30 days; however, they are subject to change without notice unless a firm order with a Deposit is placed with us and that order is acknowledged! All Trade-Ins are subject to our inspection and final approval, etc.

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WARRANTY POLICIES

As advertised, AES Reconditioned Equipment is sold with a Ten-Day Trial and a Thirty-Day Guarantee. On New Equipment, though, no Trial plan is offered, and the New Equipment is guaranteed by the Manufacturer. If, within the Manufacturer's New Equipment Warranty, problems develop, we have two suggested plans for you to follow.

PLAN A – You may telephone the Manufacturer, Person-to-Person to the Warranty Service Manager. From him you may get the necessary advice to correct the situation; or he will advise you to return it to the factory for warranty repair, etc. If it is necessary to return new equipment to the factory, the manufacturer usually pays shipping charges both ways - if not, at least one way... NOW, here's where our part comes in – Amateur Electronic Supply will pay for that phone call to the factory (up to $7.50); and if you have to absorb any shipping charges, we will pay for these (up to $15.00). After the equipment is returned to you and is functioning properly, simply send us a copy of your telephone bill with the phone call to the manufacturer circled, and a copy of any freight bills you may have had to pay – we will promptly send you our check as outlined above.

PLAN B – If you prefer, you may return New Equipment defective within Warranty to AES rather than the Manufacturer. Amateur Electronic Supply maintains a complete Service Department and is an authorized Warranty Center for most popular lines. Before shipping any New or Reconditioned equipment back to us for warranty repairs, please contact our Service Manager, Mr. Miles Cundy at our Milwaukee store. You may telephone Mr. Cundy Person-to-Person COLLECT. If Mr. Cundy should be tied up at the time you call (as he often is), please **BE SURE** to have the operator leave Your Name and Telephone Number, so he may return your call as soon as possible.

IMPORTANT! When returning any equipment (New or Reconditioned) for any reason, BE SURE to enclose a letter of explanation with your shipment. When shipping via REA please specify ICC #33G to the agent, make sure the equipment is packed well and, of course, insured for the proper value.

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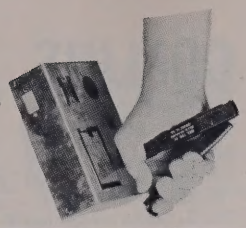
AMATEUR ELECTRONIC SUPPLY will always stock new products as they are brought out, even though they are not shown in our latest Catalog. Prices, specifications and product availability in this Catalog are subject to errors or changes without notice.

ADEL

Easy to use . . . Hand-operated NIBBLING TOOL cuts round, square or irregular holes in sheet metal to any shape or size. Start with a 7/16" hole, then "NIBBLE" to size required ..... $ 4.15

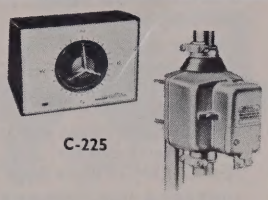
Replacement Punch ..... $ 2.12



ALLIANCE ROTORS

T-45 Manual – 5 wire	$ 24.03
U-100 Automatic – 4 wire	28.78
C-225 Automatic – 5 wire	35.97
TBB Thrust Bracket	2.97

See Belden listing for Rotor Wire.



C-225

AMECO

Also see pages 54 & 55

TX-62 2 & 6m Transmitter ..... (Bonus B)	$159.95
VFO-621 VFO for 6, 2 and 1¼m	69.95
BIU Bridge Indicator Unit	$ 17.95
SWB Standing Wave Bridge	11.95

NUVISTOR CONVERTERS

CN-50K 6 Meter Converter – Kit	$ 34.95
CN-50W 6 Meter Converter – Wired	49.95
CN-144K 2 Meter Converter – Kit	34.95
CN-144W 2 Meter Converter – Wired	54.95
CN-220K 220 Mc Converter – Kit	34.95
CN-220W 220 Mc Converter – Wired	59.95
PS-1W Wired AC Supply	13.95
CSB Converter Selector Box – Kit	9.95

When ordering converters, specify i.f. freq. required – popular frequencies are: 14-18, 28-32, 30.5-34.5

NUVISTOR PREAMPS

PV-27 for Citizens Band	$ 12.95
PV-28 for 10 Meters	14.95
PV-50 for 6 Meters	14.95
PV-144 for 2 Meters	15.50
PV-220 for 1¼ Meters	17.95
PCL-P (with built-in supply)	34.95
PT 6-160 Meter Transceiver Preampe	59.95

AMECO BOOKS

5-01 Radio Amateur Q & A License Guide	$ .50
6-01 Mastering the Morse Code	.50
3-01 Radio-Electronics Made Simple	1.95
102-01 Radio Amateur Theory Course	3.95
8-01 Q & A License Guide - Element 1,2 & 9	.75
9-01 Q & A License Guide - Element 3	1.95
10-01 Q & A License Guide - Element 4	1.25
11-01 Transistor Theory & Circuits	1.75
14-01 Amateur Log Book	.50
16-01 Advanced Class License Guide	.50
17-01 Extra Class License Guide	.75

TELEGRAPH KEYS

K-4 Brass base, with shorting bar	$ 3.50

CODE PRACTICE OSCILLATORS

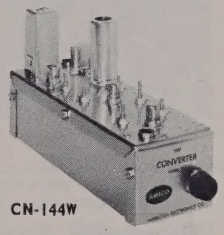
CPS-WT (Tube Type)	$ 15.95
OCMK C.P.O. & CW Monitor Kit	9.95
OCMW As above, but Wired	13.50

CODE COURSES – 33 RPM

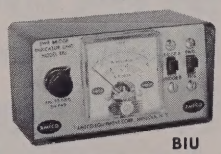
100-33 (Junior) up to 7½ w.p.m.	$ 3.95
101-33 (Senior) up to 18 w.p.m.	7.50
103-33 (Advanced) 8 to 18 w.p.m.	3.95
104-33 Extra Class Code Course (20 w.p.m.)	3.95
105-33 General Class Supplementary Code Course (12/15 w.p.m.)	3.95
106-33 Extra Class Supplementary Code Course (19-24 w.p.m.)	3.95

TX-62

VFO-621



CN-144W

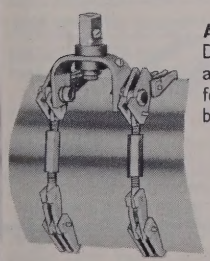


BIU

SWB

OM-W

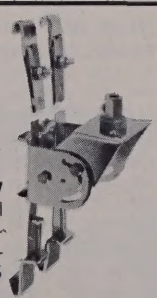
K4



ASP-143

ANTENNA SPECIALISTS M-191
Double chain bumper mount with ample Z-type double lock links for adjustment to almost any size bumper. 3/8"–24 thread ... $ 9.65

ANTENNA SPECIALISTS M-147
Double strap stainless steel bumper mount with tension adjustment to fit almost any size bumper. 3/8"–24 thread $11.95



ANTENNA SPECIALISTS

130-470 Mc ¼ WAVE MOBILE ANTENNAS

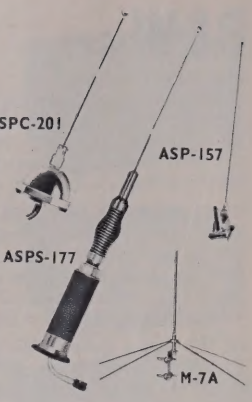
ASPR-1 for ¾" hole (solderless)	$ 3.35
ASPR-1L as above, but with 12' cable	5.85
ASPC-201 for ⅜" hole, snap-in mount	3.75
ASPC-201L as above, but with 12' cable	6.70
ASP-157 Gutter Mount (temporary), 12' cable	9.60

130-174 Mc 3db GAIN, MOBILE ANTENNAS

ASPS-177 Rooftop, ¾" hole	$ 27.95
ASP-446 Rooftop, ⅜" snap-in mount	27.95
ASP-415 for Cowl, Deck, or Fender	31.75
ASP-324 Trunk Groove Mount	29.65

144-174 Mc BASE STATION ANTENNAS

ASP-7A Low Power Ground Plane	$ 8.95



Rubber plugs

For covering holes from which antenna has been removed. May be inserted from outside of car body.

Model No.		Diameter	Hole Size
M-10	$1.25	3¾"	1 5/16"
M-11	.85	1½"	¾"
M-16	.85	1¼"	⅜"
M-18	.85	1½"	⅞"

ARRL

1969 Radio Amateur's Handbook	$ 4.00
Handbook (as aobve) Buckram Bound	6.50
The Mobile Manual for Radio Amateurs	2.50
ARRL Antenna Book	2.50
Single Sideband for the Radio Amateur	2.50
The Radio Amateur's V.H.F. Manual	2.50
Radio Amateur's Operating Manual	1.50
Understanding Amateur Radio	2.50
Hints and Kinks	1.00
A Course in Radio Fundamentals	1.00
How to Become a Radio Amateur	1.00
Radio Amateur's License Manual	1.00
Learning the Radiotelegraph Code	.50
Gateway to Amateur Radio	2.50
ARRL Map	2.00
QST Binder	3.00
Log Book	.50
Minilog	.30
Lightning Calculator, Type A Radio	1.50
Lightning Calculator, Type B Ohm's Law	1.50
Message Blank Pads	.35

The radio amateur's handbook
THE ARRL ANTENNA BOOK
The Radio Amateur's LICENSE MANUAL
Hints and Kinks
A Course in Radio Fundamentals
THE LOG OF AMATEUR RADIO STATION

ASTATIC

BASE STATION MIKES

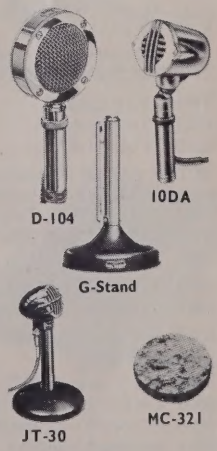
10DA Dynamic - for SSB filter rigs	$ 23.82
D-104 Crystal (-46db)	18.60
D-104C Ceramic (-49db)	18.60
JT-30 Crystal, with stand	11.04
JT-30C Ceramic with stand	11.34

DESK STANDS

Model G, push-to-talk (for relay)	$ 14.97
UG8 as above, but for all switching	17.97
El Grey with chrome trim, 5½" high	4.95
D-104 or D-104C and G stand	30.72
D-104 or D-104C and UG8	33.72

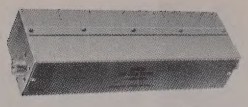
REPLACEMENT MICROPHONE CARTRIDGES

MC-127 for JT-30C (Ceramic)	$ 4.20
MC-151 for JT-30C (Crystal)	4.20
MC-320 for D-104 (Crystal)	5.70
MC-321 for D-104C (Ceramic)	4.20



Why not WRITE or CALL for OUR DEAL today ?

B&W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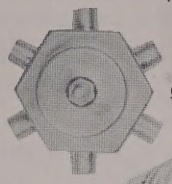
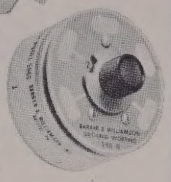

550A

901


590G

LOW-PASS FILTERS

424 1.5-30 Mc – 100 watt – 52/72 ohms	$ 13.95
425 1.5-30 Mc – 1000 watt – 52 ohms	22.50
426 1.5-30 Mc – 1000 watt – 75 ohms	22.50
423 for 6 Meters – 100 watt – 52/72 ohms	15.95
427 for 6 Meters – 1000 watt – 52/72 ohms	25.75

COAX ANTENNA SWITCHES

550A 1 pole, 5 position - Radial Connectors	$11.15
590 1 pole, 5 position - Rear Connectors	11.55
590G as above, but grounds unused positions	11.55
591 2 pole, 2 position - Rear Connectors – for switching devices in or out	11.35

NOTE: Switch Model 590G is supplied with a Dial Plate and knob. Models 590 and 591 have a Dial Plate, but no knob. Model 550A is supplied "Plain" (No Dial Plate or knob)

ALUMINUM TUNING KNOBS

901 1 3/8" knob, 1 7/8" skirt	$ 3.38
902 7/8" knob, 1" skirt	1.35
903 5/8" knob, 11/16" skirt	.83

MARKED DIAL PLATES

3818 Dia. 2¼" Marked: 3.5, 7, 14, 28	$ 1.10
3829 Dia. 3½" Marked: 3.5, 7, 14, 28	1.50
DP-2 Dia. 3½" Marked: positions 1, 2	1.50
DP-5 Dia. 3½" Marked: positions: 1, 2, 3, 4, 5	1.50

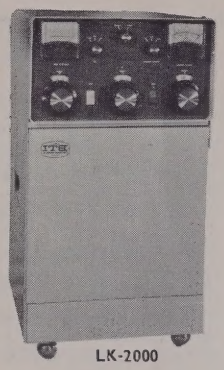
3829

DP-5

BTI

LK-2000	Complete 2KW Linear... (Bonus D)	$795.00
LK-2000HD	Complete 3KW Linear (Bonus D)	895.00
RF-2000	Table top RF Section... (Bonus C)	595.00
PS-2000	Power Supply only... (Bonus C)	300.00
PS-3000	Heavy-duty Supply... (Bonus C)	400.00
DL-2000	2000 watt Dummy Load	75.00

The new LK-2000HD linear has been improved in design to operate continuous FSK radio teletype at twice the Amateur legal power input - thus making it ideally suited for MARS work, where higher power is authorized. The increased ratings also allow round-the-clock SSB operation at 3000 watts P.E.P. – plenty of reserve power.


LK-2000

BELDEN

COAXIAL CABLE

8240 RG-58U	53.5 ohm *	$ .05'
8219 RG-58AU	50 ohm FOAM **	.06'
8237 RG-8U	52 ohm **	.14'
8214 RG-8U	50 ohm FOAM **	.16'
8241 RG-59U	73 ohm *	.06'
8238 RG-11U	75 ohm **	.12'

* – indicates solid center conductor
** – indicates stranded center conductor

TWIN-LEAD CABLE

8222	72 ohm (small)	$ .02'
8210	72 ohm 1 KW	.08'

ROTOR CABLE (ROUND)

8484	4 wire (AR-22, U-100)	$ .04'
8485	5 wire (C-225, T-45)	.05'
8448	8 wire (Ham-M, TR-44)	.09'
8488	8 wire (TR-2C)	.06'

COILED MICROPHONE CABLE

8497	1 shielded, 2 unshielded	$ 1.56

8018	#8 aluminum ground wire	.03'

ANTENNA WIRE

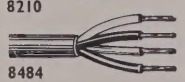
8000	#14 (7 strands #22)	$ .03'
8009	#14 Solid – Enameled	.03'
8008	#12 Solid – Enameled	.05'
8014	Insulated – Indoor	.03'

8240

8237

8222

8210


8484

8497

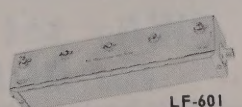
8000

8009

8014

BUD

LF-601	Low Pass Filter (adjustable)	23.60


LF-601

COLLINS

Also see pages 16 to 23

TRANSMITTER

32S-3 80-10m, 180w PEP	$ 865.00

RECEIVERS

75S-3B SSB, AM, CW, RTTY	$ 795.00
75S-3B/AM filter socket	810.00
75S-3C (extra crystal board)	850.00
75S-3C/AM filter socket	864.00
51S-1 General Coverage	1946.00

TRANSCEIVERS

KWM-2 80-10m, 180w PEP	$1150.00
KWM-2/136B-2 blanker	1296.00
KWM-2A (extra crystal board)	1250.00
KWM-2A/136B-2 blanker	1396.00
136B-2 Noise Blanker	133.00
351D-2 KWM-2 Mobile Mount	120.00

LINEARS & VHF CONVERTERS

30L-1 80-10m, 1000w PEP	$ 520.00
30S-1 80-10m, 2000w PEP	2200.00

POWER SUPPLIES

MP-1 14vdc – for KWM-2	$ 235.00
PM-2 Portable AC – for KWM-2	168.00
516E-2 28vdc – for KWM-2	470.00
516F-2 AC – for 32S/KWM-2	153.00

CABLES

440E-1 (MP-1 to KWM-2)	$ 40.00
440F-1 (extension – 516F-2, PM-2)	17.00

SPEAKERS

312B-3 for S-line, KWM-2, 51S-1	$ 32.00
312B-4 Console	195.00
312B-5 PTO Console (KWM-2)	350.00

MECHANICAL FILTERS

F-455KQ-200 for 75S-3B – 200 cycle	$ 107.00
F-455FA-05 for 75S-3B – 500 cycle	61.00
F-455FA-08 for 75S-3B – 800 cycle	61.00
F-455FA-15 for 75S-3B – 1.5 kc	61.00
F-455FA-21 for 75S-3B, 32S-3 – 2.1 kc	36.00
F-455FA-31 for 75S-3B – 3.1 kc	50.00
F-455FA-40 for 75S-3B – 4.0 kc	50.00
F-455FA-60 for 75S-3B – 6 kc	50.00

NOVICE ADAPTERS

399B-4 for 32S-1 (less crystals)	$ 40.00
399B-5 for KWM-2 (less crystals)	46.00

MICROPHONES

SM-3 Base Station Mike	$ 60.00
MM-1 Mobile Hand Mike	25.00
MM-2 Mobile Boom Mike/Earphone	47.00

CARRYING CASES

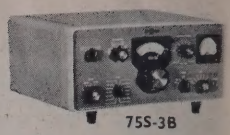
CC-2 for KWM-2, 30L-1, 51S-1, 62S-1	$ 85.00
CC-3 for 312B-4 or 312B-5 & MP-1, or 516E- & TD-1, plus spares	107.00

ACCESSORIES & MISCELLANEOUS

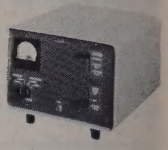
DL-1 Dummy Load	$100.00
302C-3 Directional Wattmeter	130.00
Spinner Knob for S-line, KWM-2	3.00
Crystals for S-line, KWM-2	5.00

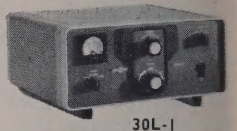
PRINTED MATERIAL

Amateur Single Sideband	$ 4.00

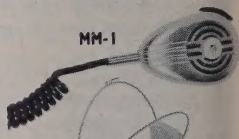

75S-3B

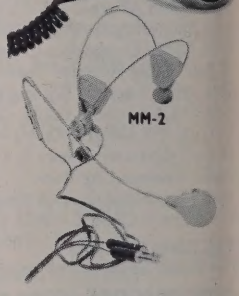
312B-3


312B-4


30L-1

KWM-2 and PM-2 in CC-2 case


MM-1


MM-2

CROWN METAL

BARE COPPERWELD ANTENNA WIRE

AN-122	100 feet #12	$ 3.23
AN-123	150 feet #12	4.88
AN-124	250 feet #12	7.65
AN-126	500 feet #12	13.20
AN-142	100 feet #14	2.78
AN-143	150 feet #14	4.13
AN-144	250 feet #14	6.00
AN-146	500 feet #14	9.83

ENAMELED COPPERWELD ANTENNA WIRE

AN-122E	100 feet #12	$ 4.20
AN-123E	150 feet #12	6.23
AN-124E	250 feet #12	10.20
AN-126E	500 feet #12	19.43
AN-142E	100 feet #14	3.08
AN-143E	150 feet #14	4.50
AN-144E	250 feet #14	6.53
AN-146E	500 feet #14	12.98

COPPERWELD GROUND RODS

RT-36	3/8" x 6 feet	$ 1.98
RT-48	1/2" x 8 feet	4.98

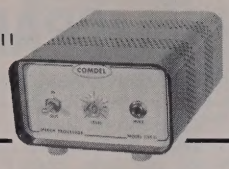
Copperweld

NON-RUSTING

CROSS-SECTION OF COPPERWELD WIRE

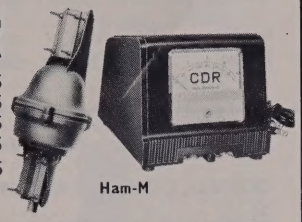
MOLTEN-WELDING MAKES THE TWO METALS INSEPARABLE

COMDEL



CPS 11 Speech Processor	$120.00
DW-1550 In-line Directional Wattmeter	95.00

CORNELL DUBILIER



AR-22R Light duty rotor (automatic)	$ 34.95
TR-2C Light duty rotor (manual)	30.95
TR-44 Medium duty rotor	69.95
Ham-M Heavy duty rotor	129.95
AR-33 Light duty automatic/preset	49.95

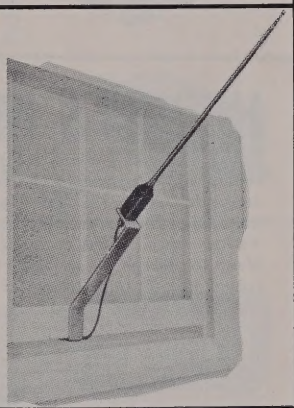
See Belden for Rotor Wire

COWAN (CQ MAGAZINE)

102-1 CQ Anthology, Volume I	$ 2.00
102-2 CQ Anthology, Volume II	3.00
103 New Sideband Handbook	3.00
105 Mobile Handbook	2.95
109 Ham's Interpreter	1.50
113 CQ Binders	5.00
115 VHF for the Radio Amateur	3.50
116 New RTTY Handbook	3.95
117 Surplus Schematics	2.50
119-1 Antenna Roundup I	3.00
119-2 Antenna Roundup II	4.00
120 Shop & Shack Shortcuts	3.95
121-1 Electronic Circuits Handbook	3.00
121-2 Electronic Circuits Handbook	3.00
122 Surplus Conversion Handbook	3.00
123-1 Antenna Handbook, Volume I	4.00
123-2 Antenna Handbook, Volume II	5.00
125 RTTY from A to Z	5.00
126 Short Wave Listeners Handbook	5.00

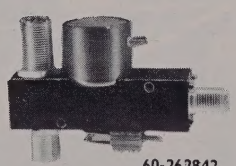
CUSHCRAFT – See pages 69 & 70

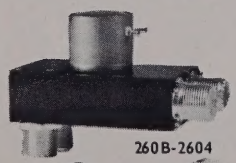
DPZ

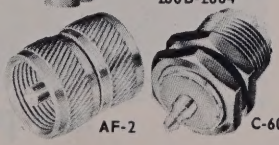


DPZ "VACATIONER" PORTABLE ANTENNA – has been designed as a transmitting/receiving antenna for the traveling Amateur. It can be installed and disassembled in minutes. Ideal for operation at motels, hotels, and in apartment houses. The "Vacationer" has provided communition aboard various types of boats on which it has been installed. Fits into KWM-2 carrying case. Up to 300 watts PEP input on SSB, up to 180 watts input on CW and AM phone. Maximum length when whip is extended is 57" – minimum length when whip is retracted is 18½". Covers 40, 20, 15, 10, 6, and 2 Meters – 2 pounds ..... $ 29.95

DOW KEY



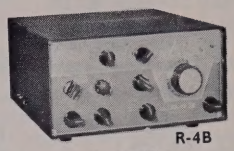


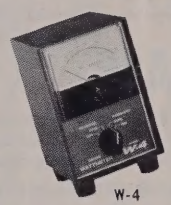


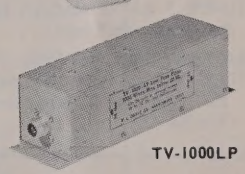
60-262842 Antenna Relay – Grounds receiver terminal during transmit – with DPDT external contacts – 110vac	$ 18.00
60-222842 As above, but 12vdc	18.00
260B-2604 for linears in and out – 110vac.	23.90
OUTDOOR COAXIAL SWITCHES	
71-290401 SP6T – 24vac	$ 57.75
72-290401 SP3T – 24vac	27.20
P-6469 Stancor 25.2 volt Transformer	4.06
DK60M Replacement coil – 12vdc	4.10
DK60M Replacement coil – 110vac	5.10
DK60DPDT External contacts only	2.80
COAXIAL ADAPTORS	
A-204 UHF Female-to-Male Auto plug	$ 1.40
A-210 UHF Female-to-Male Phono	1.24
A-F2 Double Female Connector	.76
C-60P One-hole Chassis Connector	.69

DRAKE

Also see. pages 26 & 27







2C Receiver (Bonus C)	$229.00
2AC Calibrator for 2C	16.95
2CS Speaker for 2C	19.95
2CQ Q-Multiplier for 2C	39.95
2NB Noise Blanker for 2C	24.50
R-4B Receiver (Bonus D)	430.00
SW-4A Receiver (Bonus C)	299.00
AL-4 Loop Antenna for SW-4A	19.95
AN-5 Short Wave Antenna	8.00
MS-4 Speaker for R-4B, SW-4A, TR-4/6	19.95
TR-4 80-10m Transceiver (Bonus D)	599.95
RV-4 Remote VFO for TR-4	99.95
FF-1 Crystal Control ad. for TR-4	24.50
34NB Noise Blanker kit for TR-3/4	129.00 *
TR-6 6m Transceiver (Bonus D)	599.95
RV-6 Remote VFO for TR-6	99.95
AM Plug-in Filter for TR-6	35.00
CW Plug-in Filter for TR-6	35.00
LSB Plug-in Filter for TR-6	35.00
9NB Plug-in Noise Blanker for TR-6	95.00
DC-4 12vdc Supply for TR-4/6	125.00
DC-24 24vdc Supply for TR-4/6	210.00
MMK-3 Mobile Mounting kit for TR-4/6	6.95
2NT CW Transmitter (Bonus B)	149.00
T-4XB SSB Transmitter (Bonus D)	449.00
AC-4 AC Supply for TR-4/6, T-4XB	99.95
L-4B Linear Amplifier (Bonus D)	750.00
Adaptor Cable to use with L-4B/AC-3	5.00
TR-44B Communications station – less power supply and crystals	850.00
T-4B Transmitter – No VFO	395.00
MN-4 Antenna Match Network	90.00
MN-2000 Antenna Match Network	175.00
W-4 RF Wattmeter (2-30 Mc)	49.50
WV-4 RF Wattmeter (20-200 Mc)	73.50
CB Wattmeter	49.50
C-4 Station Control Console	295.00 *
TC-6 6m Transmitting Converter	250.00 *
TC-2 2m Transmitting Converter	300.00 *
SC-2 Receiving Converter for 2 Meters	69.00
SC-6 Receiving Converter for 6 Meters	64.50
CPS-1 Power Supply for SC-2, SC-6	17.95
SCC-1 VHF Crystal Calibrator	24.50
CC-1 Converter Console	24.50
FILTERS FOR TV SETS	
TV-300-HP High Pass Filter	$ 4.50
TV-300-FMS Rejects 88-108 Mc	4.50
LOW PASS FILTERS	
TV-CB-LP 100 watts - below 30 Mc	$ 6.95
TV-100LP 100w to 30 MC, 20w on 6m	5.95
TV-1000LP 1000w to 30 Mc, 100w on 6m	16.95
LN-4 Line Filter 120v 5 amp	7.30
Crystals for 2C, R-4B, SW-4A, T-4XB	5.00
Fixed-Frequency Crystals	7.50
CA-1 Stacking Cabinet Adaptor	15.00
729SRD Microphone w/plug	17.00

* available approximately mid-summer 1969

EDITORS & ENGINEERS

Radio Handbook, 17th Edition	$ 12.95
Transistor Radio Handbook	5.00
The Surplus Handbook, Vol. I	3.50
Surplus Radio Conversion Manual – Specify Vol. I, II or III ..... each	3.50
Commercial Radiotelephone Q & A Study Guide	6.95
Amateur Radio Incentive Licensing Study Guide	2.75
The VHF Amateur	4.50
Single Sideband: Theory and Practice	6.95

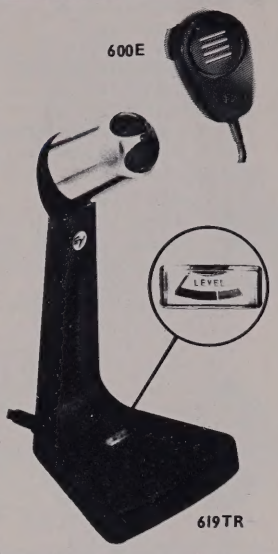
AMATEUR ELECTRONIC SUPPLY

4828 W. Fond du Lac Ave.; Milwaukee, Wis. 53216
Phone (414) 442-4200

STORE HOURS: Mon & Fri - 9 am to 9 pm; Tues, Wed & Thurs - 9 am to 5:30 pm; Sat - 9 am to 3 pm

EICO — See pages 56 to 63

ELECTRO-VOICE



BASE STATION MIKES

664 Cardioid Dynamic ..... $ 53.40
418 Desk Stand for above 8.10
729SR Cardioid Ceramic with switch..... 16.80

NEW! 619TR is a Dynamic base station microphone with a built-in transistorized compressor amplifier. Ideal for use where a very high value of modulation is desired. It is balanced for hand-held use as a "grip-to-talk" mike – yet it will remain firmly positioned as a desk microphone. The push-to-talk switch may be locked in the "on" position. A level meter in the base indicates the degree of compression which may be adjusted independently of the adjustable gain control. The 619TR may be used into any load value: Lo-Z (150 ohms), Medium Z (3,000 ohms) and all values of High Impedance. Works with any rig! Supplied less battery. 9¾" high, 4½" wide, 4¾" deep. 2 pounds ..... $ 42.00

Eveready #216 Battery for 619TR ..... $ .53

MOBILE MICROPHONES

600E Dynamic ..... $ 24.60

EZ WAY — Write us for latest CATALOG

GALAXY — See pages 51 to 53

GAM

NOTE: Gain figures shown represent db gain over coaxial antenna. Antennas may be cut for operating 144-160 Mc. (Cutting chart supplied)

MOBILE ANTENNAS

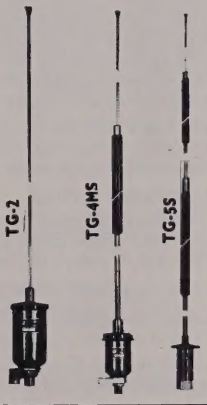
TG-2 6 db, may be mounted on roof or body, or side-mounted on a mast extension from a body or bumper mount – 43½" ..... $ 15.45

TG-2R 6 db, for roof mounting only, features "NO BULGE" mount. With 12' RG-58 – 40¾" $ 18.00

TG-4MS 9 db, (2 stacked) for bumper or for body mounting – 96" long ..... $ 37.80

BASE STATION ANTENNA

TG-5S 10.5 db Gain, designed to mount on threaded 1¼" pipe – 12'9" long, weighs only 3.5 pounds – Terrific! ..... $ 74.25



GONSET — Also see page 25

913A

C-21A

GSB-201

903A 2m Linear 500w ..... (Bonus C) $299.50
903 Mk II as above, but with built-in antenna transfer relay..... (Bonus D) 355.00

910C GSB-6 6m Transceiver .... (Bonus D) 319.50
911A AC Supply for 910C 74.95
912A DC Supply for 910C 61.95
913A 6m Linear, 500w ..... (Bonus C) 259.95
913 Mk II as above, but with built-in antenna transfer relay..... (Bonus D) 319.50

3365 Mobile Mount 4.95
C-21A Mobile Speaker 14.00

3340A GSB-201 Mark II 80-10m Linear Amplifier. Four 811's provide 1500w P.E.P. input. Has built-in antenna transfer relay so that it may be used with a transceiver or separate receiver/transmitter combination. Built-in bias supply..... (Bonus C) $329.95

3340B GSB-201 Mark III as above, but has four 572B tubes for 2 KW P.E.P. input (Bonus D) $375.00

3342 6m Comm IV – 12&110 .... (Bonus D) 309.95
GA-138 108-138 Mc Comm ..... (Bonus D) 495.00

3448 5 db RF Attenuator 12.95
3449 10 db RF Attenuator 12.95
3450 15 db RF Attenuator 12.95

HALLICRAFTERS

HAM BAND EQUIPMENT (80-10m)

SR-400, Cyclone, 400w P.E.P .... (Bonus D) $799.95
PS-500A-AC AC Supply 129.95
P-500DC DC Supply 159.95
SR-2000, Hurricane, 2000w P.E.P. (Bonus D) 1095.00
P-2000 AC Supply 450.00

HA-20 VFO/VSWR Console – for SR-400 or SR-2000..... 199.95

HA-1A Electronic Keyer..... 119.95
HA-18A Code Practice Oscillator..... 9.95

GENERAL COVERAGE RECEIVERS

SX-133 ..... (Bonus B) $249.95
SX-122A Dual Conversion..... (Bonus C) 395.00
HA-19 Crystal Calibrator for SX-122A 19.95

SPEAKERS

R-47 4" (for voice only)..... $ 14.95
R-49 Mobile Speaker 17.95
R-50 5x7" Base Station Speaker 22.50
R-51 4x6" with 24-hour clock 39.95

SR-400

SX-122

R-51

HAMMARLUND

HXL-1 80-10m Linear, 2KW PEP (Bonus D) $469.95

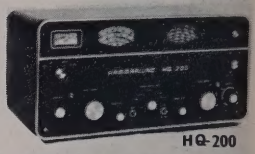
RECEIVERS

HQ-200 .54-30 Mc Gen. Coverage (Bonus C) $249.50
S-101 Speaker for HQ-200..... 19.95
HQ-110AC/VHF 160-2m..... (Bonus C) 359.95
HQ-180AC General Coverage .... (Bonus D) 519.95
HQ-180AX with 11 crystal Freq. (Bonus D) 549.95

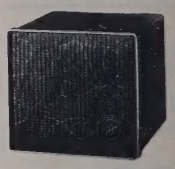
S-100 Speaker for HQ-100/110 ..... 19.95
S-200 (larger) Speaker for HQ-145/180..... 24.95

XC-100 100kc Calibrator kit..... 15.95
XC-100P Calibrator for HQ-145 series 15.95
Noise Immunizer 39.95
Crystal Box kit for field installation 49.95

HQ-215 MK II 80-10m Solid State ..(Bonus D) 399.99
S-215 Speaker for HQ-215 ..... 24.95

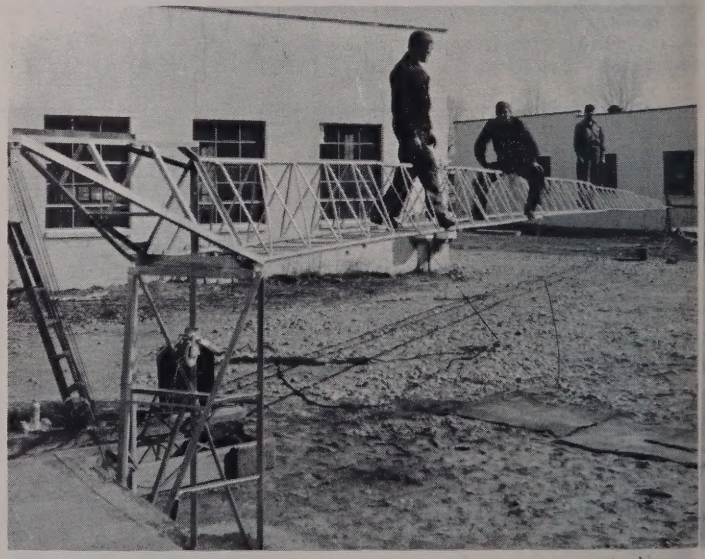

HQ-200

HQ-180AC


S-200

HEIGHTS MANUFACTURING

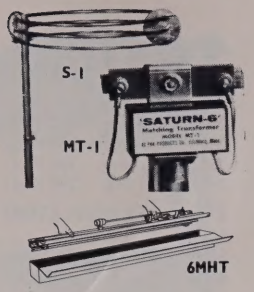
Before purchasing a new tower, you should look into this line of fine aluminum towers. Various models can feature: hinge base, crank-up, fold-over, etc. Self supporting up to 136 feet. Manufactured from strong, light, high tensile, Alcoa aluminum. This extremely light but sturdy tower makes for easy imstallations. Various combinations of sections can be combined to withstand wind velocities of up to 140mph, or to support antenna wind loads of up to 26 square feet projected area. Write us today, for complete literature, specs and prices.



See pages 64 to 68

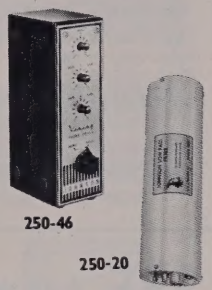
HI PAR

S-1 "Saturn 6" Mobileer Antenna	$ 16.95
S-2 "Saturn 6" Antenna only	11.95
S-3 Mast Bracket	1.00
S-4 Bumper Hitch	3.00
S-5 Three piece 12 ft. Telescoping Mast	3.50
S-6 Two piece 5 ft. Mast	1.50
MT-1 Matching Transformer	4.95
6MHT Portable 6m, 3 element	13.95
HT2M Portable 2m, 8 element	16.95



JOHNSON

6N2 VFO Kit	240-133-1	$ 34.95
6N2 VFO W&T	240-133-2	54.95
6N2 Xmtr W&T	240-201-2	194.50
STANDARD KEYS		
114-310 Black Wrinkle		$ 3.75
114-310-3 Black Wrinkle/Switch		4.95
HEAVY DUTY KEYS		
114-320 Black Wrinkle		$ 5.25
114-321 Chrome Plated		5.85
HIGH SPEED STANDARD KEY		
114-100-3 Satin Brass/Switch		$ 8.95
STATION ACCESSORIES		
SWR Coupler	250-37	$ 11.75
SWR Indicator	250-38	25.00
52 ohm Low Pass	250-20	14.95
72 ohm Low Pass	250-35	14.95
Phone Patch	250-46	25.00
TR Switch	250-39	29.95
275w Matchbox	250-23-1	64.95
As above, w/SWR	250-23-3	94.95
KW Matchbox/SWR	250-30-3	154.50



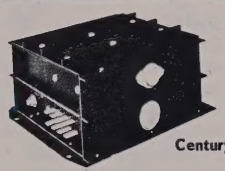
LINEAR SYSTEMS

CENTURY

400-12 for 12 volt cars	$129.50
500-12 12vdc to 1150vdc	149.50
1000-12 12vdc to 2200vdc	249.50
"Commander" Combination 12vdc & 110vac	249.50

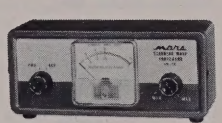
The following are New "STELLAR" 60 cycle FREQUENCY STABLE Inverters (12 to 110 volts)

Model 12-200S 200 watt	$165.00
Model 12-500S 500 watt	200.00
Model 12-1000SM 1000 watt	400.00



MARS

SW-10 SWR Bridge & Indicator 160-6m	$ 18.95
SW-50 SWR (2 indicating meters)	24.50
LE-2 Hybrid Phone Patch	29.95
EK-75 Electronic Keyer	34.50
SM-3 S-meter	9.95

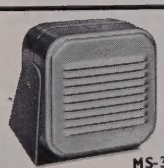


MILLEN

90651 Grid Dip Meter/Case	$ 78.50
90751 Tone Modulator	17.10
90672 Antenna Bridge	51.50
92200 Transmatch	147.00
92201 Transmatch Jr.	77.00

MISCO

Model MS-3-BB Mobile Speaker is weather and dust proofed. Supplied with mounting bracket. 4" high, 4" wide, 2⅞" deep ..... $ 6.49



MOSLEY (Also see page 91)

POWER-MASTER ANTENNAS

A-310C 3 Element 10m Beam	$ 52.75
A-315C 3 Element 15m Beam	65.95
A-203C 3 Element 20m Beam	142.00

VHF SCOTCH-MASTER ANTENNAS

A-92-S 9 Element 2m Beam	$ 20.45
A-76-S 7 Element 6m Beam	43.80
A-56-S 5 Element 6m Beam	35.10

STACKING KITS FOR A-92-S

A-92-S-SK-1 (Two Horizontal)	$ 3.95

TRAP MASTER ANTENNAS

TA-31 10, 15, 20m Dipole, 1 KW	$ 34.50
TA-32 2 element, 10, 15, 20m Beam, 1 KW	92.75
TA-32 Jr 3 el, 10, 15, 20m beam, 300 watts	66.05
TA-33 3 element, 10, 15, 20m beam, 1 KW	133.10
TA-33 Jr 3 el, 10, 15, 20m beam, 300 watts	92.75
TA-36 6 element, 10, 15, 20m beam, 1 KW	167.85
MP-33 3 el, 10, 15, 20m beam, 750 watts	105.45
Classic 33 3 el, 10, 15, 20m W.S., 1 KW	145.15
Classic 10-15 3 el, 10, 15m, 1 KW	107.15
Classic 36 6 el, 10, 15, 20m, 1 KW	171.92
X-15 15m Novice Beam kit	35.30

2 ELEMENT CUBICAL QUADS

MCQ-10 10 Meter	$ 67.25
MCQ-15 15 Meter	67.25
MCQ-20 20 Meter	74.37
MCQ-3B Tri-Band	105.00

TRAPMASTER MULTIBAND VERTICALS

V-3 Jr 10, 15, 20m, 300 watts	$ 23.95
RV-3C 10, 15, 20m, 1 KW	26.20
RV-4C 10, 15, 20, 40m, 1 KW	38.23
RV-5C 10 to 80m, 1 KW	63.36
RKV-345 Roof Mounting kit	4.21

SIGNAL-MASTER ANTENNAS

S-401 Rotary Dipole, 40m, 1 KW	$ 86.35
S-402 2 element, 40m Beam, 1 KW	158.20

CONVERSION KITS

TA-40KR 40m Conversion kit for MP-33, TA-31, TA-32, TA-33, TA-36	$ 56.90
TA-36/CL-36 converts TA-36 to CL-36	38.78
MPK-3 converts TA-33 Jr to MP-33	31.45

TRAP DOUBLET ANTENNAS

TD-2 Dipole for 40 & 80m, 1 KW	$ 50.10
TD-3 Jr (for 10, 15, & 20 or 40m), 300 watts	19.35
TD-3 as above, but 1 KW	28.65

DIPOLE LOADING COILS

40-D Loading Coil for 40m	$ 11.15
75/80-D Loading Coil for 80m	11.15

DIPOLE ANTENNA

DIV-80 Single Band, 10-80m, 1 KW	$ 7.42
DPC-1 Dipole Connector	1.85

SWL RECEIVING ANTENNAS

SWL-7 (for 11, 13, 16, 19, 25, 31 & 49m)	$ 26.79
RD-5 (for 10, 15, 20, 40, 80m)	28.50

COAX TERMINATION OUTLETS

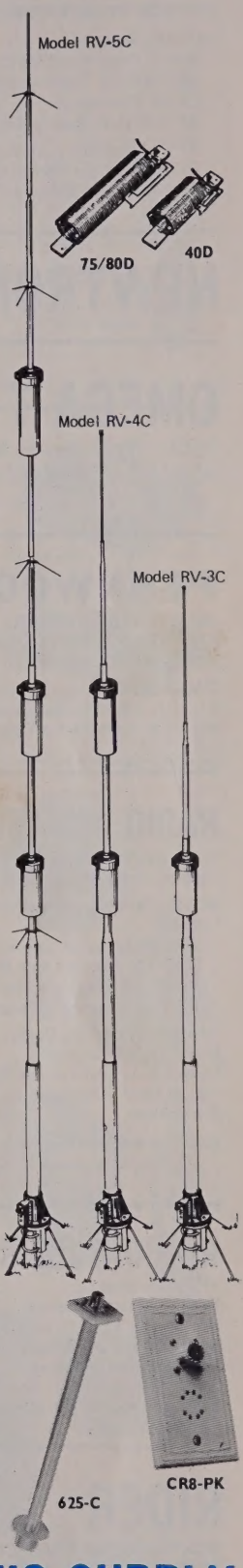
C1-PK (Single Coax)	$ 3.00
C2-PK (Double Coax)	4.90
CR145-PKB (1 coax & 4 or 5 wire rotor)	3.91
CR8-PK (1 coax & 8 wire rotor)	5.20
625C Coax Termination & Wall-Thru	2.85

LANCER 1000 MOBILE ANTENNA

ML-10C Antenna, 4 coils, coil caddy	$ 87.60
ML-1 Basic Antenna (works on 10m)	35.55
ML-15 15m coil only	8.90
ML-20 20m coil only	9.50
ML-40 40m coil only	12.00
ML-78 75/80m coil only	18.80
ML-5 coil caddy only	7.30
ML-3 basic top whip section only	8.45

5/8 WAVE GROUND PLANE ANTENNAS

DIPLOMAT 2 – for 2 Meters	$ 10.58
DIPLOMAT 6 – for 6 Meters	21.75
DIPLOMAT 10 – for 10 Meters	29.30
AK-60 Mast Adaptor for 2" OD Mast	5.95
1746 (E-1010) Mosley Weather Guard	1.24



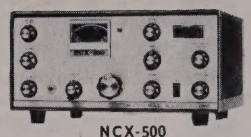
AMATEUR ELECTRONIC SUPPLY

4828 W. Fond du Lac Ave. Milwaukee, Wis. - 53216

PHONE (414) 442-4200

Mon & Fri: 9 am to 9 pm – Tues, Wed, Thurs: 9 am to 5:30 pm – Sat: 9 am to 3 pm

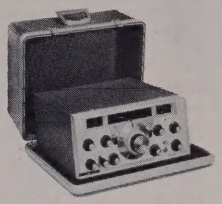
NATIONAL


NCX-500

NCX-500 80-10m Transceiver....(Bonus D) $425.00
AC-500 AC Supply ONLY 99.00
NCXA AC Supply/Speaker Console..... 110.00
XCU-27 100kc Calibrator 26.60

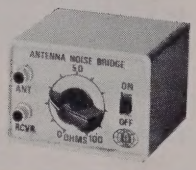
NCL-2000 Linear Amplifier.....(Bonus D) 685.00

HRO-500 Receiver .....(Bonus Dx3) 1675.00
RMK-5 Rack Mounting Kit..... 66.50
HRO-500-TS Table Speaker..... 40.00
LF-10 Preselector 349.00
BP-8 Nickel Cadmium Battery only..... 213.00
WPC-5 Portable Carrying Case only 125.00
CK-5 Complete Portable Conversion kit.. 437.00
HRO-500P (HRO-500 and CK-5) 1990.00


HRO-500 in WPC-5 case

NEWTRONICS – See pages 92 to 94

OMEGA-T



MODEL TE7-01 Antenna Noise Bridge.....$ 24.95
MODEL TE7-02 Extended Range Noise Bridge..... 34.95

PENNWOOD Clocks

NUMECHRON TYMETERS
#100 (12 Hour) Walnut Case.....$ 13.95
#100-24H (24 Hour) Walnut Case 15.00

CALL-IDENT (With 10 Minute Reminder)
#112 (12 Hour) Walnut Case.....$ 19.50
#124 (24 Hour) Walnut Case 22.50

#100-24

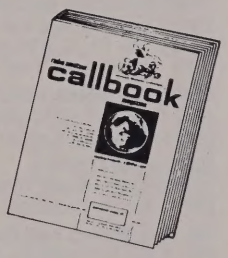
RADIO AMATEUR CALLBOOK

Radio Amateur Callbook (USA) . . ... $ 6.95
Foreign Radio Amateur Callbook.. ..... 4.95

NOTE: Callbooks are published four times a year as follows:
SPRING issue on sale after March first
SUMMER issue on sale after June first
FALL issue on sale after September first
WINTER issue on sale after December first

Radio Amateurs DX Guide.....$ 2.00
Prefix Map of the World 1.00
Great Circle Chart of the World 1.00
Map of North America..... 1.00
World Atlas..... 2.00

Radio Amateur's Reference Library, consisting of three maps and Atlas 3.00

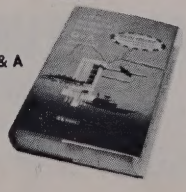


RADIO PUBLICATIONS

VHF Handbook.....$ 3.75
Beam Antenna Handbook..... 3.95
Novice and Technician Handbook..... 2.95
Better Shortwave Reception..... 3.25
Cubical Quad Antennas..... 3.95
S-9 Signals 1.00
Electronic Construction Handbook 2.95

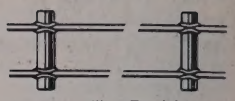
RIDER

SIGHT-N-SOUND CODE COURSES
REC-08 NOVICE COURSE 0 to 8 wpm – Three 10" LP records, includes 47 identification cards and Book, etc.....$ 9.50
REC-920 ADVANCED COURSE 9 to 20 wpm – Three 10" LP records, book .....$ 8.95
REC-020 COMPLETE COURSE 0 to 20 wpm – Six LP records, 47 identification cards, book .$ 15.95
0130 Commercial Q & A Manual..... 7.10



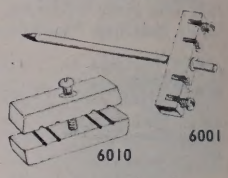
SAXTON

OPEN-WIRE FEED LINE
2500 450 ohm (100 feet) .....$ 3.40
2500 450 ohm (250 feet) 8.20
2502 300 ohm (100 feet) 3.40
2502 300 ohm (250 feet) 8.20


Open-Wire Feed Line

STAND-OFF INSULATORS FOR OPEN WIRE
6001 5½" nail type .....$ .15
6003 5" wood screw type ..... .15
6005 5" pole clamp type..... .20

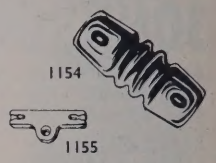
6010 Open Wire Stress Insulators – (for mounting on Wood) It is used for anchor points or for taking up slack in open wire, etc..... 70¢ ea



FIBRE GLASS GUY LINE
7000 500 lb. test .....$2.75 per 100 feet
7002 1000 lb. test ..... 4.45 per 100 feet

PORCELAIN INSULATORS
1154 "Standard" Brown Glazed.....$ .10
1155 Center for Doublet 4½ x 2¾" ..... .35
1156 Airplane type "egg" insulator ..... .10

1126 Antenna Window Strap ..... .18



SBE A Divison of LINEAR SYSTEMS

SB-34 80-15m Transceiver .....(Bonus D) $449.00
SB2-LA Linear Amplifier.....(Bonus B) 259.00
SB3-DCP Mobile Inverter for Linear 249.50
W-72 Control Cable for above..... 7.50
SB2-VOX VOX Accessory Unit..... 37.95
SB3-XC 25kc Crystal Calibrator..... 28.95
SM2-MB Mobile Mounting Bracket..... 12.50
SB2-CW Codaptor 42.50
SB2-MIC Microphone..... 14.95

SB-34

SHURE

SHURE Model 444 is the most popular Hi-Impedance Base Station microphone for SSB. Rugged, reliable, more natural sounding, controlled magnetic cartridge has output equal to a crystal unit! Specially tailored response with rising characteristic and sharp cut-off below 300 and above 3,000 Hz insures highest "Talk Power". Press-to-talk bar with optional locking feature provides ideal switching functions for both "press-to-talk" or VOX operation. Stand height is adjustable. Gray "Armo-Dur" plastic case. 10 3/8"h, 4"w, 5¾"d. 1½ pounds. 7 foot cord.....$ 27.00

SHURE Model 444T microphone is similar to the 444, except has a built-in 2-transistor preamplifier to give a Variable high output. Frequency response is 200 to 6,000 Hz, good for AM, FM, or single sideband units. 5 foot coiled cord. Less battery. $31.20

Eveready #216 battery for 444T..... .53

SHURE Model 404C is one of the best close-talking mobile microphones available. This controlled magnetic, hi-impedance mike fits snugly in the palm of the hand and has a push-to-talk switch. Frequency response is 400 to 4,000 Hz. Rugged "Armo-Dur" plastic housing is approximately 3 1/16" high, 2 5/8" wide, 1 11/16" deep. Coiled cord and mounting bracket. 10 ounces.....$ 21.00

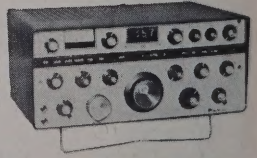
SHURE Model 401A is a lower-cost controlled magnetic hi-impedance mobile microphone.....$ 13.80

SHURE Model 104A is a CARBON hand-held microphone with push-to-talk.....$ 19.20

REPLACEMENT MICROPHONE CARTRIDGES
R5D Controlled Magnetic for 444.....$ 7.20
R5F Controlled Magnetic for 401A, 404C... 7.20
R-10 Carbon for 104A..... 5.40

SIGNAL ONE

MODEL CX7 Deluxe Integrated Station $1595.00
Optional standard CW filter 50.00
Optional deluxe CW filter..... 135.00


SIGNAL/ONE Model CX7
"DELUXE INTEGRATED STATION"

Also see pages 28 & 29

SWAN

SWAN 260 Cygnet 80-10m AC/DC (Bonus D)	$435.00
SWAN 270 Deluxe Cygnet (Bonus D)	525.00
SWAN 350C 80-10m Transceiver (Bonus D)	420.00
SWAN 500C 80-10m – Deluxe (Bonus D)	565.00
SWAN 250C 6m Transceiver (Bonus D)	450.00
NS-1 6m Noise Silencer	36.00
TV-2B 2m Transverter – specify 14, 21, 28, or 50Mc if	350.00
Mark II 80-10m Linear – w/tubes (Bonus D)	395.00
Mark 6B 6m Linear – w/tubes (Bonus D)	395.00
Power Supply for Mark II & 6B	265.00
117XC AC Supply w/spkr. in cabinet	105.00
14-117 12v DC Supply w/cable	130.00
510X MARS Oscillator - less crystals	55.00
508 Full Coverage VFO	145.00
210 6 Meter VFO	120.00
VX-II Plug-in VFO	35.00
100kc Calibrator for 350	19.50
100kc Calibrator kit for 350C only	19.50
500kc Calibrator kit for 250 or 250C	19.50
FP-1 Phone Patch	48.00
AF-800 Audio Filter	28.00
45 Swantenna – manual	65.00
55 Swantenna – remote control	95.00
Custom Contour Bumper Mount	24.95
Kwik-on Antenna Connector	3.25
Universal Mobile Mounting kit	12.00
14C 12v DC Module/cable	$ 65.00
14CP AS above, but Positive Ground	75.00
117X Basic 117v AC Supply ONLY	65.00
230X Basic 230v AC Supply ONLY	75.00
117 or 230vac Line Cord (specify)	8.00
8' Cable w/plug (Supply to Transceiver)	6.00
230XC 230v AC Supply, speaker, cabinet	115.00
14-230 12v DC Supply w/230v Basic	140.00

500C

Mark II & AC Supply

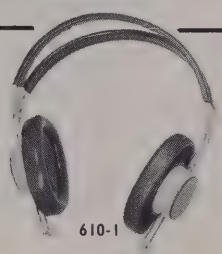
117XC

14-117

Also see pages 30 to 41 & 95

TELEX

MR-6 500-600 ohm Headset	$ 18.95
610-1 600 ohm Headset	6.95
610-2 2000 ohm Headset	7.95



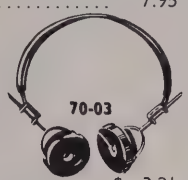
610-1

TRIMM

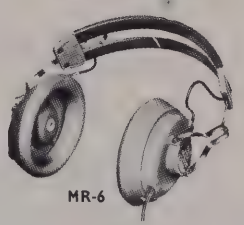
"DEPENDABLE" HEADSETS

70-03 3.2 ohm	$ 3.21
70-06 600 ohm	3.21
70-2K 2000 ohm	3.33
660 Ear Cushions	1.50

660



70-03



MR-6

TURNER

BASE STATION MICROPHONES
for Relay or Electronic Switching

+2 Transistorized w/Variable output	$ 33.00
Extra 216 Battery for above	.53
254C Ceramic	17.40
254X Crystal	17.40
454C Ceramic – for SSB	19.20
454X Crystal – for SSB	19.20

MOBILE MICROPHONES

M+2U Transistorized w/Variable output wired for Relay Switching	$ 23.70
JM+2U (for Electronic Switching)	23.70
Extra Battery for M+2U and JM+2U	1.05
350C Ceramic	9.00
J-350C (for Electronic Switching)	9.00
355C Ceramic	9.00
360R Carbon	11.40
360 Ceramic (for Relay Switching)	9.00
J-360 Ceramic (for Electronic Switching)	9.00
360 LOW Z For low-impedance transistorized CB sets such as Johnson	9.90
C-9035A2 Replacement Dash Bracket	.38
35096-1 Replacement Coiled Cord	2.25
DB-1 Magnetic Dash Bracket	.90

454X

350C

TURNER CONTINUED

REPLACEMENT INTERIORS

21A	Crystal – for 254X, 350X	$ 3.90	27C	Ceramic– for 454C	3.90
27	Crystal – for 454X	3.90	35	Ceramic– for +2, 360, J-360	4.80
21C	Ceramic– for 350C, 254C	3.90	33	Carbon – for 254R, 350R, 360R	4.80
			334	Ceramic– for M+2	4.80

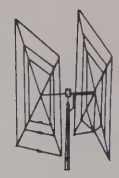
UNADILLA

W2AU SUPER 2 ELEMENT TRI-BAND QUADS

Fiberglas Model	$ 99.95
Vinyl Jacketed Bamboo Model	64.95

SEPARATE QUAD COMPONENTS

Set of 8 Vinyl Jacketed Spreaders (12'6")	$ 21.50
Set of 8 Fiberglas Reinforced Spreaders	54.95
Boom-to-Mast Mount w/Hardware	5.95
End Spiders, each	6.95
Set of 16 Stainless Steel Compression Clamps	6.00
W2AU Balun w/Built-in lightning arrestor, 3-30 Mc 1:1 ratio, matches unbalanced coax line to balanced antenna	12.95

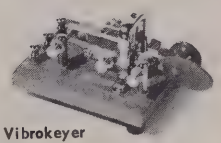


W2AU Quad

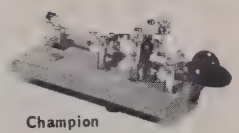
W2AU Balun

VIBROPLEX

Vibro-Keyer	$ 20.95
Vibro-Keyer – Deluxe Finish	27.50
Champion – Standard Finish Only	21.95
Lightning Bug	25.95
Lightning Bug – Deluxe Finish	32.95
Original	27.50
Original – Deluxe Finish	32.95
Super De Luxe Presentation	43.95
Phillips Code Book	2.75
Carrying Case	8.00



Vibrokeyer



Champion

Also see page 24

WATERS

COAXIAL SWITCHES

375 "PROTAX" SP6T (Antenna Switch)	$ 14.50
376 "PROTAX" SP5T (Antenna Switch)	13.95
380 "PROTAX" SPDT (Antenna Switch)	12.95

NOTE: "PROTAX" Coaxial Switches provide automatic grounding of unused terminals. Model 376 has Radial Terminals – 375 and 380 have axial terminals

VHF ACCESSORIES

346 Nuverter (6 & 2m Converter)	$175.00
373-2 Coaxial Filter (2m)	31.95
373-6 Coaxial Filter (6m)	34.95

COLLINS ACCESSORIES

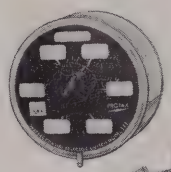
340A Q-Multiplier for KWM-2	$ 59.95
349 "Channelator"	88.95
Crystals for above each	6.95
349-27 Adaptor for S-Line	19.95

STATION ACCESSORIES

3001 Universal Hybrid Phone Patch	$ 54.95
3002 As above, with Compreamp	75.95
358 (Compreamp kit for 3001)	19.95
334A Dummy Load/Wattmeter (1000w)	135.00
374 Dummy Load/Wattmeter (1500w)	145.00
384 Dummy Load (no Wattmeter)	65.00
331 "Little Dipper"	129.75
359 "Compreamp"	27.95
361 Codax Automatic Keyer	97.95
369A Reflectometer (2000w)	135.00
371-1 Wide-Range Attenuator	31.95
371-2 As above, with BNC Connectors	34.95
371-3 As above, with Type N Connectors	41.95

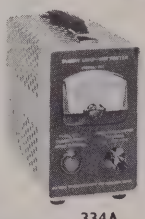
AUTO-MATCH MOBILE ANTENNA

370-1 Mast	$ 15.95
370-2A Radiator Tip	7.95
370-3 Band Adder	21.95
370-4A High Power Radiator Tip	7.95
370-75 75m Coil	19.95
370-40 40m Coil	19.95
370-20 20m Coil	19.95
370-15 15m Coil	19.95
370-10 10m Coil	19.95
370-48 Coax Cable Assembly	2.65



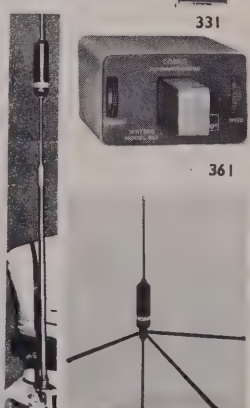
375 (axial)

376 (radial)



334A

331



361

AUTO MATCH

BAND-ADDER

24 Hr. Clock - $7.95

8" overall 24-hour chrome-plated metal wall clock. Inner dial with south polar projection map of the world indicates the time around the world at a glance. Polar projection dial can be adjusted for various time zones.

QSL CARD PACKET for HAMS or CB'ers

$1.00 FRAMES — 60 CARDS!

EACH PACKET FRAMES AND DISPLAYS 20 CARDS IN CLEAR PLASTIC

POCKETS OPEN AT CENTER TO RECEIVE CARDS EASILY

3 Packets 1.00
10 Packets 3.00

SOLVES CARD DISPLAY PROBLEM AND DRESSES UP SHACK INSTANTLY!

TO: AMATEUR ELECTRONIC SUPPLY
4828 West Fond du Lac Ave.
Milwaukee, Wis.—53216

I am interested in the following new equipment:

_____

_____

I have the following to trade: (what's your deal?)

_____

_____

_____

Rush me your quote – I understand that I am under no obligation.

Name _____

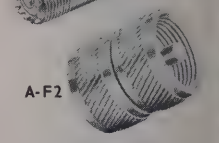
Address _____

City & State _____ Zip Code _____

Show here your Ham or CB Call (if any) _____

☐ SEND LATEST RECONDITIONED EQUIPMENT BULLETIN

CONNECTORS

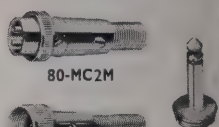


COAX CONNECTORS

PL-259 Male Coax Connector	$ .59
UG-175U Reducer for RG-58	.18
UG-176U Reducer for RG-59	.18
PL-258 Junction (double female)	1.15
SO-239 Chassis Connector – female	.55
UG-106U Hood for SO-239	.33
M-358 Tee Connector	3.09
UG-146 Right-angle Adaptor	1.68
A-F2 Double male	$ .76
C-60P 1-hole mt. chassis connector	.69
31-002 Type BNC Male Connector	.67
82-61 Type N Male Connector	1.17

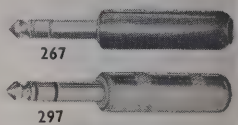
COAX ADAPTORS

A-204 UHF Female-to-Male Auto Plug	$ 1.40
A-210 UHF Female-to-Male Phone	1.24
4400 UHF Female-to-Male Type N	3.23



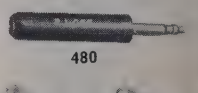
POPULAR MICROPHONE CONNECTORS

80-MC2M 2-pin male plug	$ .69
80-PC2F 2-pin female chassis mt. socket	.60
80-MC2F 2-pin female in-line socket	.71
91-MC3M 3-pin male plug	1.01
91-PC3F 3-pin female chassis mt. socket	.73
91-MC3F 3-pin female in-line socket	1.07
91-MC4M 4-pin male plug	1.03
91-MC4F 4-pin female chassis mt. socket	.72
91-MC4F 4-pin female in-line socket	1.10
75-MC1F 1-conductor mike plug	.64
75-MC1M 1-conductor cable jack	.46
75-PC1M 1-conductor chassis mt. receptacle	.41
75-MC1P Phone plug adaptoe	.52



STANDARD ¼" PLUGS WITH SOLDER LUG TERMINALS

250 2-conductor – plastic handle	$ .48
280 2-conductor – shielded handle	.69
267 3-conductor – plastic handle	.72
297 3-conductor – shielded handle	.90
40 2-conductor phone plug with screw terminals, black plastic handle is ¾" diameter	.51
480 (PJ-068) .206" 3-conductor mike plug	2.16
S-12B Chassis-mounted JACK for above	.45



CHASSIS-MOUNTED JACKS

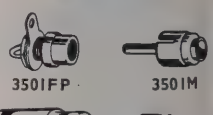
11 2-conductor – open circuit	$ .27
12A 2-conductor – closed circuit	.30
12B 3-conductor – open circuit	.36

FLAT MICROPHONE PLUGS

S-230 3-conductor – screw terminals	$1.20
237 3-conductor – solder type	.90

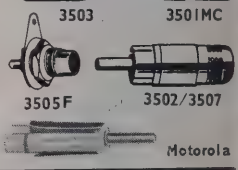
PHONO-TYPE CONNECTORS

3501M Plug	$ .06
3501MC Plug – with cable clamps	.09
3501FP Panel-mounted jack	.21
3502 Plug – shielded	.30
3503 In-line extension	.39



PHONO CONNECTORS WITH NYLON INSULATION FOR RF USE

3505F Panel-mounted Jack	$ .36
3507 Shielded Plug	.48
Motorola Type Antenna Plug	.11



AUTOMOTIVE FILTERS

NEW-TRONICS

VR-30 for Voltage Regulator	$ 2.50
GF3-30 Tunable Generator Filter	2.75

GOLD-LINE

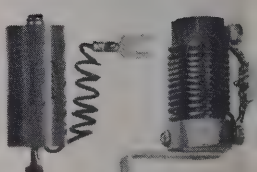
Alternator Filter	$ 3.75
CB Generator Filter	3.25

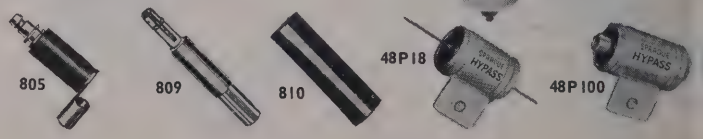
SPRAGUE FEED-THRU CONDENSERS

48P18 .5mfd 40 amp for Generators	$ 3.03
48P100 .5mfd 60 amp for Alternators	4.29

HERMAN SMITH RADIO SUPPRESSORS

805 Snap-on for Spark Plug	$ .40
809 Plug-in for Distributor	.50
810 In-line for Distributor	.25





HAM CRYSTALS

$2.95 each

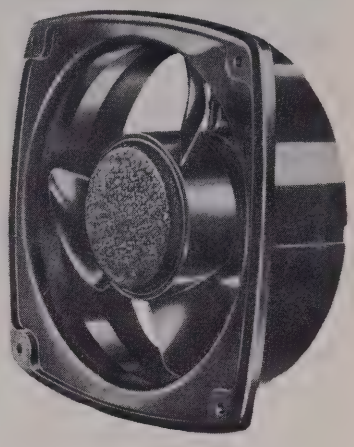
AMATEUR ELECTRONIC SUPPLY has in stock a good selection of popular Amateur Band Crystals, selling for $2.95 each. When ordering, specify whether you would accept crystals CLOSE TO a given frequency, (± so many kc's) etc.

REFERENCE CHART

Band	Freq. Range	Multiplier	Order Crystal Freq. From— To
80-METER GENERAL	3500 to 4000 KC	FUNDAMENTAL	3501-3999
80-METER NOVICE	3701 to 3749	FUNDAMENTAL	3701-3749
40-METER GENERAL	7000 to 7300	DOUBLE	3500-3650
40-METER GENERAL	7000 to 7300	FUNDAMENTAL	7000-7300
40-METER NOVICE	7151 to 7199	DOUBLE	3576-3599
40-METER NOVICE	7151 to 7199	FUNDAMENTAL	7151-7199
20-METER GENERAL	14,000 to 14,350	DOUBLE	7000-7151
20-METER GENERAL	14,000 to 14,350	TRIPLE	4667-4780
15-METER GENERAL	21,000 to 21,450	TRIPLE	7000-7150
15-METER NOVICE	21,000 to 21,250	TRIPLE	7034-7082
10-METER GENERAL	28,000 to 29,700	X4	7000-7425
6-METER GEN. & TECH.	50 MC to 54 MC	X6	8334-8900
2-METER GENERAL	144 MC to 148 MC	X18	8001-8221
2-METER NOV./TECH.	145 MC to 147 MC	X18	8056-8165

DELWYN® *Whisper Fan*

for cooling applications in COLOR TV.. HI-FI SETS... HAM GEAR!



HEAT an ever present menace to Ham Gear and other Electronic Equipment. You prevent parts failure–beat the heat that can wreck your set when you install a Delwyn Whisper Fan. The money you might have to spend on one heat-caused repair bill more than pays for your Delwyn Whisper Fan. Dimensions: 5-1/4" L x 5-1/4" W x 1-5/8" D Installation Kit included.

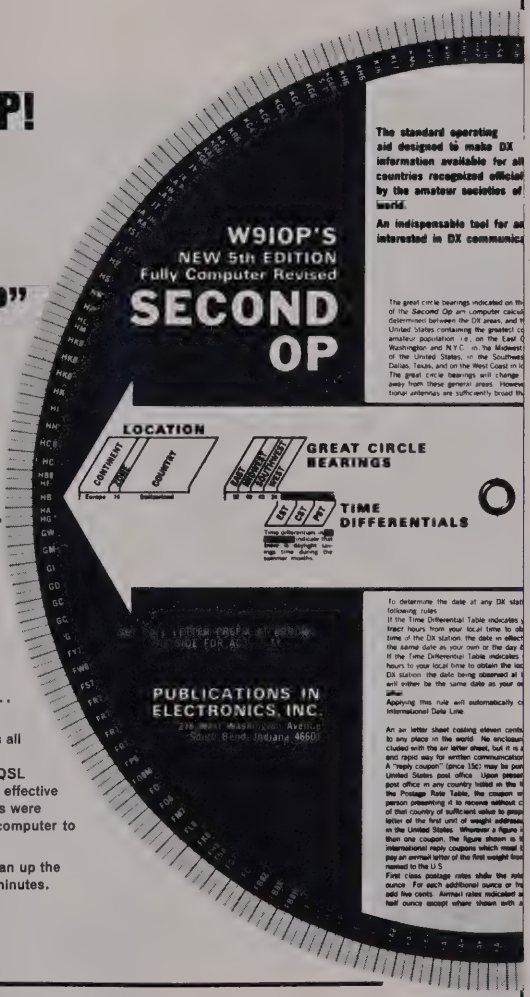
$14.95

From W9IOP!

The new 1969 5th Edition of the world famous "SECOND OP" DX calculator

Actual size 10½" diameter

$1.50



Whether you are a beginning DXer or a long-time member of the Honor Roll, a "Second Op" can be your best friend in the ham shack. In just seconds it gives you accurate beam headings from the East, Midwest, West, and now the Southwest. You also see time difference, DX zone, country, continent, and postal rates instantly for every prefix. And there's also a handy space to log each prefix worked ... plus confirming QSL's.

The 5th Edition "Second Op" is all new in every way. Every current country and prefix is listed, plus QSL bureaus and other vital facts for effective and enjoyable DX. Beam headings were programmed and checked by a computer to guarantee accuracy.

Just a $1.50 investment can clean up the paperwork in your ham shack in minutes.

NEW EIGHT CHANNEL *Electra Bearcat*

Lights flash in sequence as channels are automatically scanned

ELECTRA BEARCAT Police/Fire/Business radio receiver features automatic scanning. This new 8 channel receiver is unique in concept and design and most fascinating to watch and listen to. The feature which makes it fascinating and different is the automatic scan and manual channel select facility, It has the ability to sample 8 fixed frequency channels, lock on to the first channel which becomes active and continues to scan when the carrier is discontinued. The scanner may be disabled and the channel selected manually when desired. The receiver may be used in a 12 volt automobile or as a 110v AC fixed station device by selecting either one of the two power cables supplied. The total power consumption from the auto battery will be about the same as that of the glove box lamp. 9" wide, 4" high, 7" deep. Supplied with mobile mounting bracket and LESS CRYSTALS. (8 channels available)

Great for 2 Meter FM too !

MODEL BCL 30-50MC Low Band	$139.95
MODEL BCH 150-174MC High Band	139.95
MODEL BCU 450-470MC UHF	149.95
Crystals - Each	5.00

When ordering crystals be sure to specify Exact Frequency of each channel. Allow at least 30 days for delivery on receivers and/or crystals. Receivers may accommodate up to eight channels within any 10 MC spread except the Model BCL (30-50MC) which is limited to a seven MC spread.

Lightning Protection

CUSHCRAFT "BLITZ BUG" COAX LIGHTNING ARRESTORS

MODEL LAC-1 has one SO-239 and one PL-259 connector	$ 3.95
MODEL LAC-2 has two SO-239 connectors	4.45

RADAR SENTRY

Radar Sentry alerts a driver of a controlled radar speed zone far in advance of the critical clocked area. As the radar beam is picked up, the Radar Sentry sounds a steady beep reminding the driver to slow down and stay within safe speed limits. Weighing only 13 ounces, the small compact magnesium case measures 3-1/2" W x 2-3/4" D x 2-1/4" H. Completely transistorized...no wires required... clips to sun visor $29.95

12 Volts

6 Channels

VARITRONICS FDFM-2S is a compact, ruggedly constructed 2 Meter FM transceiver. This equipment is small and lightweight, making it excellent for portable or mobile use. It is a natural for Amateur 2 Meter FM repeater systems. The interior construction is of computer module technique on high-quality P.C. board. Stages are shielded from one another to assure stability and prevent spurious interaction. Circuitry design is straight forward and utilizes 33 transistors and 9 diodes.

Transmitter RF is 10 watts input, with 5 watts of output. Crystal multiplication is x8. Maximum frequency deviation is less than 15KHz. Current drain in transmit is 1.5 amps; in receive - 225MA.

Receiver is double-conversion, with sensitivity better than .5uV @ 20db S/N. First receiver IF is 5.25MHz, second IF is 455KHz. Receiver spurious response is –60db, and band width is 20KHz @ 6db point. Speaker impedance is 8 ohms, with at least 1 watt of audio output power. Meter indicates signal strength during receive, and relative RF out during transmit. In the "BATT" position, the meter indicates battery level.

The FDFM-2S comes complete with a high-impedance microphone, built-in speaker, mobile mounting bracket, mike clip, power cables and plugs, and three crystals. Channel one receives 146.94, transmits 146.34. Channel 2 is simplex on 146.94. All you do is hook the transceiver up to a good antenna and a 12-15v.d.c. power source. 6½" wide x 3" high x 7½" deep. 4¼ pounds.....$310.00

VARITRONICS MODEL FDFM-2 is similar to above model FDFM-2S, but is lower power (2 watts input - 1 watt output). Available on special order only $250.00

FDFM-2S and FDFM-2 ACCESSORIES

Battery Pack	$ 12.95
Extra Crystals	7.00
Extra Mobile Mounting Bracket	2.50
PS-1500 Regulated AC Supply	44.95

ICE-2 is a 2 Meter FM rig that operates on 117vac, 12vdc, or optional internal ni-cad battery. Fully transistorized (no tubes). Separate receiver and transmitter 3-channel operation. Self-contained 3 x 5 speaker. Strong fiberglas Epoxy printed circuit boards. Power supply regulates and filters on 12vdc operation (cannot be damaged by Reverse Polarity). 21 transistors – 14 diodes. Double conversion crystal-controlled receiver with 3 full watts of audio output and better than .3uV sensitivity (12db SINAD). Transmitter and receiver may be ordered in either wide or narrow band at no extra charge (wide band supplied unless specified). Small size 8"w x 3½"h x 9½"d. Light weight – less than 4½ pounds. True FM receiver – not a slope detector. Dynamic microphone input with push-to-talk. Built-in 117vac power supply. Simply plug in proper power cable for either 117vac or 12vdc operation – Transmitter power output 4 watts minimum. Complete with one set of crystals on 146.94, 117vac & 12vdc power cables, less mike & antenna...$285.00

OPTIONAL ACCESSORIES FOR ICE-2

Microphone	$ 16.00
Extra crystals (Transmit or Receive)	7.00
Ni-Cad Battery and Charger	47.00

Shown here is a TRI-EX LM-354 tower (partially extended), installed at our store. Use handy coupon to receive Free Tri-Ex catalog.

TO: AMATEUR ELECTRONIC SUPPLY
4828 West Fond du Lac Avenue
Milwaukee, Wisconsin 53216

PLEASE SEND ME FREE TRI-EX CATALOG

NAME: _____

ADDRESS: _____

CITY: _____

STATE: _____

ZIP CODE: _____

AMATEUR ELECTRONIC SUPPLY RECONDITIONED EQUIPMENT

★ 10 Day Free Trial (Lose only Shipping Charges) ★ 30 Day Guarantee ★ Full Credit Within 6 Months on Higher Priced New Equipment ★ EZ TERMS with convenient REVOLVING CHARGE PLAN ★ Order Direct from this Ad !

AMECO

CB series conv.	$ 17
CN series conv.	29
PV series Preamp	9
PS-1 AC Supply	8
CSB Selector box	5
TX-62 VHF Xmtr	109
62I VFO	39
R-5 Receiver	39

B&W

5100 Xmtr	$ 89
5100B Xmtr	119
51SB SSB Adaptor	109

CENTRAL ELECT.

10A Exciter	$ 49
10B Exciter	69
20A Exciter	89
QT-1 Anti-trip	6
BC-458 VFO	24
BC-458 VFO Dlx.	39
100V Xmtr	319
200V Xmtr	399
600L Linear	199
MM-2 Analyzer	59

CLEGG/ SQUIRES-SANDERS

22'er 2m Xcvr	$169
66'er 6m Xcvr	159
99'er 6m Xcvr	69
Thor 6 (RF only)	99
417 AC sup./mod.	75
418 DC sup./mod.	75
Zeus VHF Xmtr	289
Interceptor Rec.	299
Interceptor B Rec.	349
Allbander tuner	69
Venus 6m Xmtr	225
416 AC Supply	75
SS Booster	49
Apollo Linear	169

COLLINS

75A-1 Receiver	$139
75A-2 Receiver	219
75A-2A Receiver	249
75A-3 Receiver	269
75A-4 (#0-1000)	325
75A-4 (#1000-2000)	349
75A-4 (#2000-3000)	375
75A-4 (#3000-4000)	399
75A-4 (#4000-5000)	425
75A-4 (#5000-up)	449
75S-1 Receiver	325
75S-3 Receiver	425
75S-3B Receiver	495
32V-1 Xmtr	99
32V-2 Xmtr	149
32V-3 Xmtr	175
KW-1 AM Xmtr	995
KWS-1 Xmtr	595
32S-1 Xmtr	395
32S-3 Xmtr	575
30L-1 Linear	395
62S-1 VHF conv.	595
312B-3 Speaker	19
312B-4 Control	149
KWM-1 Xcvr	249
KWM-2 Xcvr	689
KWM-2A Xcvr	895
312B-5 Console	249
351D-2 Mount	75
516F-1 AC Supply	75
516F-2 AC Supply	115
516E-1 DC Supply	75
MP-1 DC Supply	119
PM-2 AC Supply	95

COMDEL

CPS-11 Speech Processor	$ 75

R. L. DRAKE

1A Receiver	$119
2A Receiver	159
2AS Speaker	9
2AQ Combo	25
2AC Calibrator	9
2B Receiver	189
2BQ Combo	29
2BS Speaker	9
2C Receiver	175
2CS Speaker	12
2CQ Combo	34
2NB Blanker	15
R-4 Receiver	275
R-4A Receiver	299
R-4B Receiver	325
MS-3 Speaker	12
MS-4 Speaker	12
SC-2 2m Conv.	49
SC-6 6m Conv.	49
CPS-1 Supply	9
SCC-1 VHF Calib.	19
TR-3 Xcvr	375
AC-3 AC Supply	65
DC-3 DC Supply	75
RV-3 Remote VFO	59
TR-4 Xcvr	439
AC-4 AC Supply	75
RV-4 Remote VFO	69
DC-4 DC Supply	85
L-4 Linear	475
L-4B Linear	525
MN-4 Matcher	59
W-4 Wattmeter	39

EICO

720 Transmitter	$ 49
722 VFO	34
723 Transmitter	34
730 Modulator	34
753 SSB Xcvr	129
751 AC Supply	49
752 DC Supply	49

ELMAC

AF-67 Xmtr	$ 49
AF-68 Xmtr	59
PMR-6 Receiver	34
PMR-6A Receiver	39
PMR-7 Receiver	59
PMR-8 Receiver	79
PSR-612 DC Sup.	19
M-1070 AC/DC Sup	39

GLOBE/GALAXY/WRL

Scout Deluxe	$ 49
Scout 680 Xmtr	35
Scout 680A Xmtr	39
LA-1 Linear	69
Chief 90 Xmtr	29
Chief 90A Xmtr	34
Chief Deluxe	39
HiBander 62	89
HG-303 Xmtr	39
Champ 300 Xmtr	89
King 500A Xmtr	225
DSB-100 Xmtr	49
SB-175 SSB Xmtr	59
755 VFO	29
755A VFO	34
V-10 VFO	29
Galaxy 300 Xcvr	129
PSA-300C AC Sup.	39
G-300 DC Supply	39
Galaxy III Xcvr	169
Galaxy V Xcvr	239
Galaxy V Mk II	259
Galaxy V Mk III	279
AC-35 AC Supply	65
AC-400 AC Supply	75
DC-35 DC Supply	69
G-500 DC Supply	75
RV-1 Remote VFO	49
VX-35 VOX	15
CAL-35 Calibrator	12
SC-35 Speaker	12
DAC-35 Console	75
2000 Lin./Supply	275
Duo-Bander Xcvr	95
UM-1 Modulator	29

GONSET

Comm I 2m	$ 79
Comm I 6m	69
Comm II 2m	89
Comm II 6m	79
Comm IIB 2m	99
Comm IIB 6m	89
Comm III 2m	109
Comm III 6m	99
GC-105 2m Xcvr	169
Comm IV 2m	199
Comm IV 6m	149
2, 6m VFO II	39
1¼, 2, 6m VFO	44
2m Linear II	89
6m Linear II	59
2m Linear III	99
6m Linear III	75
G-28 Xcvr	149
G-50 Xcvr	169
900A 2m Xcvr	199
901A AC Supply	39
902A DC Supply	39
910A 6m Xcvr	199
911A AC Supply	39
912A DC Supply	39
903A 2m Linear	199
913A 6m Linear	175
G-63 Receiver	89
G-66 Receiver	39
G-66B Receiver	49
3-way Supply	24
Thin Pak	19
G-76 Xcvr	125
G-76 AC Supply	75
G-76 DC Supply	49
G-77 Transmitter	45
G-77A Transmitter	59
GSB-100 Xmtr	169
GSB-101 Linear	169
GSB-201 Linear	199

HALLICRAFTERS

S-38E Receiver	$ 39
S-40B Receiver	59
S-53A Receiver	49
SX-71 Receiver	99
S-85 Receiver	69
SX-96 Receiver	115
SX-99 Receiver	79
SX-100 Receiver	139
SX-101 Mk I Rec.	119
SX-101 Mk II Rec.	129
SX-101 Mk III Rec.	139
SX-101 Mk IIIA	149
SX-101A Rec.	189
S-107 Receiver	59
S-108 Receiver	74
SX-110 Receiver	99
SX-111 Receiver	129
SX-115 Receiver	269
SX-117 Receiver	199
S-120 Receiver	45
SX-122 Receiver	225
SX-130 Receiver	149
SX-140 Receiver	69
SX-146 Receiver	199
HT-30 Xmtr	119
HT-32 Xmtr	225
HT-32A Xmtr	249
HT-32B Xmtr	299
HT-33 Linear	175
HT-33A Linear	275
HT-33B Linear	325
HT-37 Xmtr	199
HT-40 Xmtr	49
HT-41 Linear	175
HT-44 Xmtr	225
HT-46 Xmtr	275
SR-150 Xcvr	289
SR-160 Xcvr	169
PS-150-120 AC Sup.	75
PS-150-12 DC Sup.	59
MR-150 Rack	15
SR-400 Xcvr	595
HA-20 Console	149
SR-500 Xcvr	225
P-500AC AC Sup.	75
P-500DC DC Sup.	69
HA-2 Transverter	99
HA-6 Transverter	89
P-26 AC Supply	49
SR-34 (AC) Xcvr	149
SR-34 (AC/DC)	199
SR-42 2m Xcvr	119
SR-42A 2m Xcvr	139
SR-46 6m Xcvr	69
SR-46A 6m Xcvr	109
HA-26 2-6m VFO	39
HA-1 Keyer	59
HA-5 VFO	49

HAMMARLUND

HQ-100 Receiver	$ 99
HQ-100C Rec.	109
HQ-100A Rec.	129
HQ-100AC Rec.	139
HQ-110 Rec.	119
HQ-110C Rec.	129
HQ-110A Rec.	159
HQ-110AC Rec.	169
HQ-110A/VHF	189
HQ-110AC/VHF	199
HQ-129X Rec.	75
HQ-140 Rec.	89
HQ-140X Rec.	99
HQ-140XA Rec.	109
HQ-145 Rec.	139
HQ-145C Rec.	149
HQ-145X Rec.	159
HQ-145XC Rec.	169
HQ-145A Rec.	189
HQ-145AC Rec.	199
HQ-145XC Rec.	225
HQ-150 Rec.	139
HQ-160 Rec.	189
HQ-170 Rec.	169
HQ-170C Rec.	179
HQ-170A Rec.	229
HQ-170AC Rec.	239
HQ-170A/VHF	279
HQ-170AC/VHF	289
HQ-180 Rec.	239
HQ-180C Rec.	249
HQ-180A Rec.	339
HQ-180AC Rec.	349
HX-50 Xmtr	175
HX-50A Xmtr	225
HX-500 Xmtr	225
HXL-1 Linear	225
S-100 Speaker	12
S-200 Speaker	15

HEATHKIT

GR-54 Receiver	$ 69
GR-64 Receiver	39
GC-1A Receiver	59
XP-2 Power Pak	7
MR-1 Receiver	49
HR-10 Receiver	49
HR-10B Receiver	59
HR-20 Receiver	89
RX-1 Receiver	149
SB-300 Receiver	225
SB-301 Receiver	249
SBA-300-3 Conv.	19
SBA-400-4 Conv.	19
SB-600 Speaker	12
HS-24 Speaker	6
QF-1 Q-Multiplier	4
HD-11 Q-Multiplier	9
MT-1 Xmtr	39
DX-20 Xmtr	29
DX-35 Xmtr	35
DX-40 Xmtr	39
DX-60 Xmtr	59
DX-100 Xmtr	89
DX-100B Xmtr	99
HW-16 Xcvr	99
TX-1 Xmtr	115
SB-10 SSB Adaptor	75
HX-10 Xmtr	189
HA-10 Linear	175
HX-11 Xmtr	29
HX-20 Xmtr	129
HX-30 6m Xmtr	175
HA-20 6m Linear	95
HW-12 75m Xcvr	89
HW-12A 75m Xcvr	99
HW-22 40m Xcvr	89
HW-22A 40m Xcvr	99
HW-32 20m Xcvr	89
HW-32A 20m Xcvr	99
SB-100 Xcvr	325
SB-101 Xcvr	349
SB-110 6m Xcvr	275
SB-110A 6m Xcvr	295
SB-400 Xmtr	275
SB-401 Xmtr	249
SB-200 Linear	219
HA-14 Linear	99
HP-24 AC Supply	50
HP-14 DC Supply	75
SB-610 Sig. Monitor	59
VF-1 VFO	19
HG-10 VFO	29
HW-10 6m Xcvr	139
HW-20 2m Xcvr	169
HW-29 (Six'er)	34
HW-29A (Six'er)	39
HW-30 (Two'er)	45
GP-11 DC Supply	5
VHF-1 Seneca	139
HP-10 DC Supply	24
HP-13 DC Supply	49
HP-20 AC Supply	29
HP-23 AC Supply	39
MP-1 DC Supply	29
UT-1 AC Supply	25
HO-10 Monitor	49
HO-13 Hamscan	59

JOHNSON

Adventurer	$ 29
Challenger	54
Navigator	79
Viking I	49
Viking II	69
122 VFO	19
Ranger I	89
Ranger II	139
Valiant I	139
Valiant II	189
SSB Adaptor	175
500 Xmtr	275
Audio Amplifier	49
Pacemaker	149
Invader 200	225
Invader 2000	475
Courier Linear	139
Thunderbolt Lin	275
275w Matchbox	39
275w M'box/SWR	69
KW Matchbox	69
KW M'box/SWR	109
6N2 VHF Xmtr	85
6N2 VFO	34
6N2 Converter	39
TR Switch	19
Signal Sentry	9

KNIGHT

R-55 Receiver	$ 39
R-55A Receiver	49
R-100 Receiver	59
R-100A Receiver	69
X-10 Calibrator	9
T-50 Xmtr	29
T-60 Xmtr	34
T-150 Xmtr	59
T-150A Xmtr	69
V-44 VFO	17
TR-106 6m Xcvr	89
V-107 VHF VFO	15
TR-108 2m Xcvr	109

LAFAYETTE

HE-35 Xcvr	$ 39
HE-45 Xcvr	59
HE-45A Xcvr	69
HE-45B Xcvr	75
HE-61 VFO	12
HE-61A VFO	15
HA-350 Receiver	75

LAKESHORE

Phasemaster II	$ 89
Phasemaster IIB	139
Bandhopper VFO	59
P-400GG Linear	99

LINEAR SYSTEMS

250-12 DC Supply	$ 49
350-12 DC Supply	75
250 AC Supply	49

MOSLEY

CM-1 Receiver	$ 99
CMS Speaker	9

NATIONAL

NC-98 Receiver	$ 79
NC-109 Receiver	89
NC-125 Receiver	79
NC-155 Receiver	99
NC-173 Receiver	79
NC-183 Receiver	99
NC-183D Receiver	139
NC-188 Receiver	69
NC-190 Receiver	139
NC-270 Receiver	119
NC-300 Receiver	149
NC-303 Receiver	239
NC-300 VHF Conv.	29
Conv. cabinet	19
HRO-50 Receiver	125
HRO-60 Receiver	199
NCX-3 Xcvr	169
NCX-5 Xcvr	339
NCX-5 Mk II Xcvr	389
NCXA AC Supply	75
NCXD DC Supply	75
VX-501 VFO	125
200 Xcvr	239
AC-200 AC Sup.	59
NCL-2000 Linear	375

P&H

LA-400 Linear	$ 75
LA-400B Linear	89
LA-400C Linear	99
2-150 SSB Conv.	169
6-150 SSB Conv.	149

POLYTRONICS

PC-2 2m Xcvr	$199
PC-6 6m Xcvr	149
PC-62 Xcvr	195
PC-62B Xcvr	225

RME

DB-23 Preselect.	$ 29
4300 Receiver	89
4350 Receiver	99
4350A Receiver	109
6900 Receiver	175
4301 SSB Adaptor	39
4302 Speaker	9
VHF-126 Conv.	99
VHF-152A Conv.	39

SBE

SB-33 Xcvr	$189
SB1-DCP Inverter	29
SB2-DCP Inverter	35
SB1-LA Linear	159
SB1-VOX	15
SB1-XC Calib.	12
MB Mount	9
MIC Mike	9
SB-34 Xcvr	289
SB2-LA Linear	189
SB3-DCP KW Inv.	125
SB2-VOX	24
SB2-XC Calib.	12
SB2-CW Codaptor	25

SWAN

SW-120 Xcvr	$ 89
SW-140 Xcvr	79
SW-175 Xcvr	89
SW-117 AC Supply	59
SW-12A DC Supply	49
SW-240 Xcvr	169
117AC AC Supply	65
SW-12 DC Supply	75
400 Xcvr	199
406B VFO	50
410 VFO	75
410C VFO	85
350 Xcvr (early)	249
350 Xcvr (late)	289
350C Xcvr	325
SW-117C AC Sup.	65
512 DC Supply	69
500 Xcvr	349
500C Xcvr	389
Cygnet Xcvr	329
117XC AC Supply	80
14-117 DC Supply	100
405X MARS Osc.	35
250 6m Xcvr	229
TV-2 2m Xverter	225
Mark I Linear	375
Mark II Lin/Sup.	475
Mark 6 Linear	395
Mark 6B Lin/Sup.	495

TMC

GPR-90 Receiver	$239

TEKTRONIX

545 Scope	$1250

TRANSCOM

SBT-3 Xcvr	$189
SBA-3 AC/Spkr.	39

UTICA

650 Xcvr/VFO	$ 89
650A/VFO	99

*** All items subject to prior sale – prices subject to change without notice.**

When Ordering - Please State 2nd & 3rd Choices - if any !

COLLINS

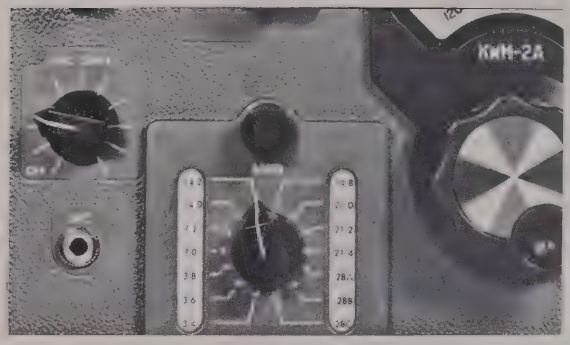
KWM-2,-2A

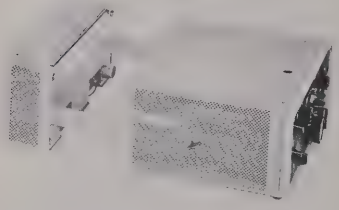
Transceivers

KWM-2 $1150

KWM-2 $1250

See page 6 for complete price list

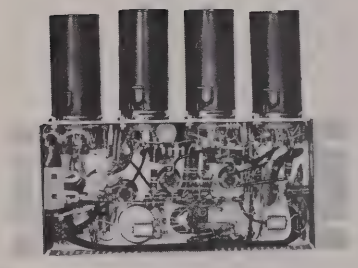




PM-2 (upper left) for Portable use — 516F-2 AC Supply recommended for regular base station operation.

The PM-2 is a lightweight, limited duty cycle power supply providing voltages needed for the KWM-2. The PM-2 quickly slides into place and connects to the rear of the KWM-2, ready to operate in minutes from either 115 v ac or 220 v ac at 50-400 Hz as a complete portable SSB or CW station. Both transceiver and power supply can be packed in the lightweight CC-2 Carrying Case for portability. A small auxiliary speaker is included in the PM-2 for emergency use. Size: 14¾" W, 7¾" H, 4" D

$168



136B-2 Noise Blanker

The 136B-2 is designed for use with the KWM-2 under mobile operating conditions. This noise blanker provides effective reduction of impulse-type noise. It differs from simple audio clipping circuits or series-type limiters by silencing ahead of the selective sideband filters. All necessary hardware and instructions are furnished for simple installation into the KWM-2. The 136B-2 requires a 40 MHz antenna which can be used as a standard whip for the car radio. Weight is 1¼ lbs. (0.567 kg). **$133**

CC-2 Carrying Case

The CC-2 is designed to hold the components of a portable Collins SSB or CW station. The KWM-2 plus the PM-2 Power Supply, the KWM-2 alone, the 30L-1, or the 51S-1 can be transported in the case. The CC-2 is adapted from the Samsonite Silhouette and includes a shock-resistant interior for the equipment. Weight: 9.5 lbs. (4.31 kg) empty. **$ 85**

CC-3 Carrying Case

The CC-3 is a specially built case for accessory components of a portable Collins SSB or CW station. The CC-3 has the same styling features as the CC-2. A molded interior allows the CC-3 to accommodate a 312B-5 (or 312B-4) Station Control Console, a 516E-2 (28 v dc) or MP-1 (12 v dc) Power Supply, a 637T-1,-2 or TD-1 Dipole Antenna, as well as a supply of spare tubes and fuses. Weight: 10 lbs. (4.54 kg) empty.

$107

The KWM-2 leads the field with the following features:
Filter-Type SSB Generation providing unsurpassed performance on both transmit and receive.
Automatic Load Control which keeps the signal level adjusted to its rated PEP, resulting in an increase in average talk power.
Inverse RF Feedback which improves linearity and reduces distortion products, giving the cleanest signal on the air.
Permeability-Tuned Variable Oscillator with linearity and stability providing the best frequency calibration available.
One KHZ Division on all bands, eliminating frequency searching and allowing you to meet anyone on sked, on any band 80 through 10 meters.

The Collins KWM-2 and KWM-2A Transceivers are unmatched in their performance and dependability in mobile and fixed station applications.

The KWM-2 power input is 175 watts PEP on SSB or 160 watts on CW. It transmits on voice or modified break in CW with a nominal output of 100 watts for complete coverage on 80 through 10 meters. Crystals are provided for all HF bands except 10 meters, where one crystal is supplied with provision for two additional crystals. The KWM-2 can be used for RTTY when a 516F-2 Power Supply and external cooling air are employed.

The transceiver is finished in light gray enamel with a simulated leather front panel to match the S/Line.

Compactness and efficiency of the KWM-2 are achieved through Collins' advanced design of having all tuned circuits and several tubes function in the dual role of transmitting and receiving. The same oscillators, Mechanical Filter and RF amplifier serve both the transmitter and receiver. CW break-in and monitoring sidetone circuits are built in.

Easily accessible controls on the front panel of the KWM-2 include the OFF-ON-NB-CAL SWITCH, EXCITER TUNING, ZERO SET, PA TUNING, LOADING, MIC GAIN, BAND SWITCH, AF GAIN, RF GAIN, EMISSION and METER SWITCH.

The KWM-2A is identical to the KWM-2 except that it has an additional crystal board permitting the operator to switch-select up to 14 optional crystals which can be outside the amateur bands. Frequencies near range edges might require trimmer readjustment for proper operation.

Specifications

FREQUENCY RANGE:
80 meters — 3.4-3.6 MHz, 3.6-3.8 MHz and 3.8-4.0 MHz.
40 meters — 7.0-7.2 MHz and 7.2-7.4 MHz.
20 meters — 14.0-14.2 MHz and 14.2-14.4 MHz.
WWV — 14.8-15.0 MHz.
15 meters — 21.0-21.2 MHz, 21.2-21.4 MHz and 21.4-21.6 MHz.
10 meters — 28.5-28.7 MHz.
With optional crystals any 200 kHz range can be tuned from 3.4 to 30.0 MHz except 5.0 to 6.5 MHz.

MODE: SSB (either sideband selectable), CW or RTTY with 516F-2 power supply and external cooling air.

TYPE OF SERVICE: SSB continuous; CW 50% duty cycle.

POWER REQUIREMENTS: Power can be delivered by an external supply such as the 516F-2, PM-2, MP-1 or 516E-2 which must furnish 800 v dc at 230 ma; 285 v dc at 210 ma; 6.3 v at 11 amps, and from —55 to —80 v dc with no current requirement. Heater supply may also be 12.6 v at 5.5 amps or 24 v at 2.75 amps. Reduced final plate voltage and current typical of mobile installations will reduce power output specifications. With the 516F-2, power consumption is approximately 190 watts in receive, 430 watts in lock-key, and 290 watts normal voice transmit.

PLATE INPUT: 175 watts PEP on SSB; 160 watts on CW.

POWER OUTPUT: 100 watts PEP (nominal) into 50 ohms.

HARMONIC AND OTHER SPURIOUS RADIATION: Carrier suppression —50 db; unwanted sideband —50 db; oscillator feed-through and/or mixer products —50 db except —40 at 3500 kHz. Second harmonic —40 db. Third order distortion —30 db.

NOISE LEVEL: 40 db below single tone carrier.

AMBIENT TEMPERATURE RANGE: 0°-50° C.

AMBIENT HUMIDITY RANGE: 0%-90%.

ALTITUDE: 0-10,000 ft.

PROTECTIVE DEVICES: PA cage is interlocked.

SIZE: With feet — 14¾" W, 7¾" H, 14" D (37.47 cm W, 19.69 cm H, 35.56 cm D).

WEIGHT: 18 lbs. 3 oz. (8.25 kg).

CALIBRATOR: 100 kHz crystal oscillator.

FREQUENCY STABILITY: Within 100 Hz during any one-hour period following 20 minute warm-up. Not more than 100 Hz with ±10% line voltage variation.

CALIBRATION ACCURACY: 1 kHz after midband calibration.

BACKLASH: Not more than 50 Hz.

VISUAL DIAL ACCURACY: 200 Hz on all bands.

OUTPUT IMPEDANCE: Variable, 50 ohms nominal, capable of matching up to 2:1 SWR.

KEYING CHARACTERISTICS: Keying is free of chirps and clicks. Break-in CW and sidetone provided.

AUDIO INPUT: High impedance microphone or 312B-4,-5 phone patch.

AUDIO FREQUENCY RESPONSE: 300-2400 Hz nominal, determined by Mechanical Filter.

AUDIO COMPRESSION CHARACTERISTICS: ALC operates on IF and RF amplifier stages and is capable of 10 db compression.

RF FEEDBACK: Approximately 10 db of RF feedback around PA and driver for improved linearity.

RECEIVER SENSITIVITY: 0.5 uv for 10 db signal-plus-noise-to-noise ratio in amateur bands.

RECEIVER SELECTIVITY: 2.1 kHz nominal bandwidth at 6 db down; 4.2 kHz bandwidth at 60 db down as determined by Mechanical Filter.

RECEIVER SPURIOUS RESPONSE: Image rejection better than 40 db. Internal spurious below 1 uv equivalent antenna input.

RECEIVER OUTPUT LEVEL: 1.0 watt maximum.

AUTOMATIC GAIN CONTROL: The audio output level does not change more than 20 db as the input signal is changed from 10 uv to 1 v. Fast attack and slow release provide excellent AVC action on voice and CW.

VIBRATIONS: 2 g at 10-33 Hz.

COLLINS

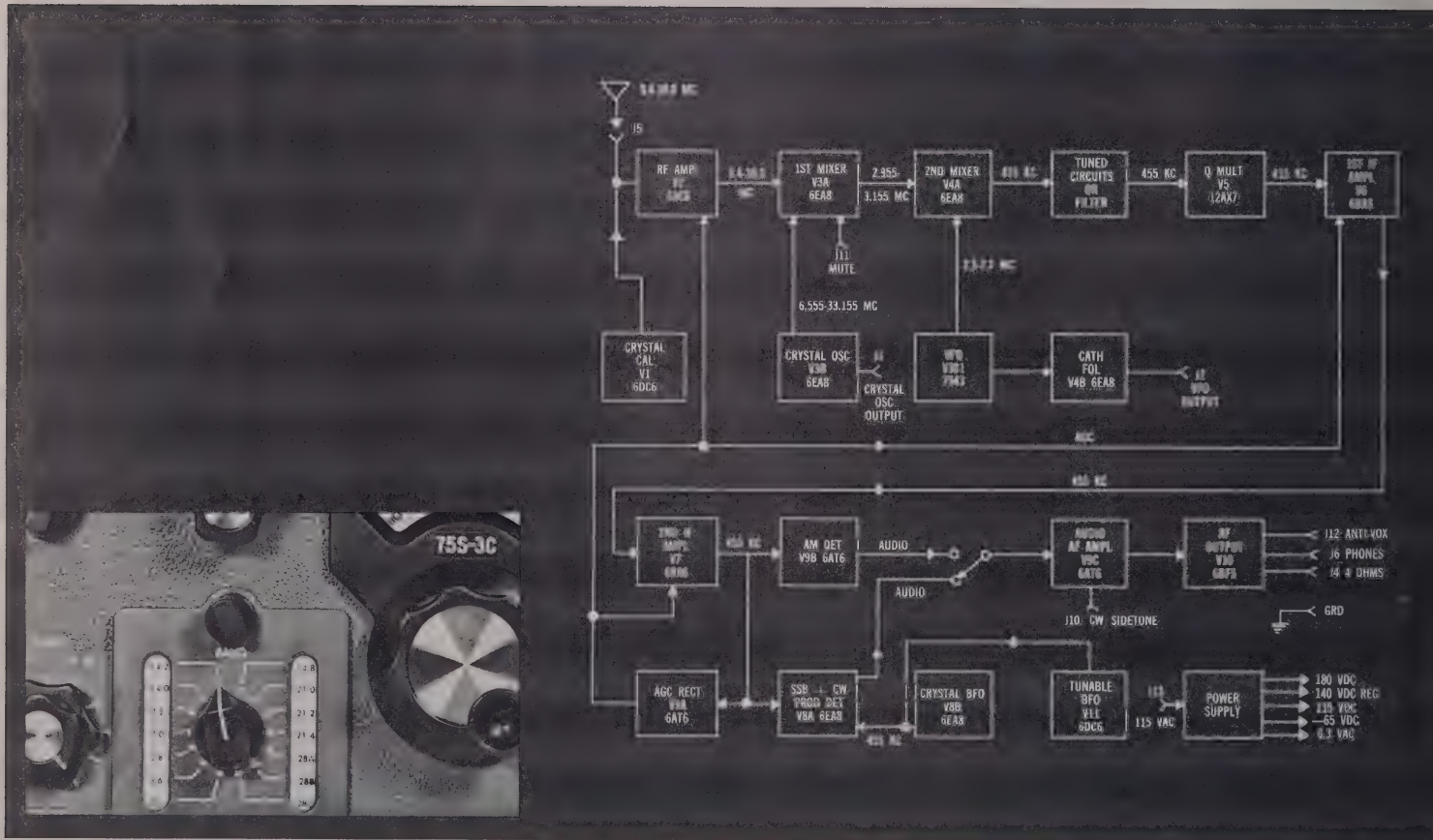
75S-3B,-3C

Receivers

75S3B $795.00

75S3C $850.00

See page 6 for complete price list



The 75S-3B combines all Collins' proven qualities in design engineering and workmanship with unexcelled frequency stability and these other features:

Rejection Tuning by a single control provides 50 db nominal rejection of unwanted heterodynes and carriers.

Variable BFO results in additional convenience to CW and RTTY operators. The variable BFO can be utilized in either the CW or SSB mode.

Optional 500 or 800 Hz Mechanical Filter offers sharp selectivity for CW. An optional 200 Hz crystal filter is also available. A 1500 Hz filter is optional for RTTY.

2.1 KHZ Mechanical Filter assures sharp skirt selectivity and optimum passband for SSB. Background noise is effectively reduced by restricting bandwidth to only that required for communication. It can also be used for CW and RTTY.

Zener Regulated Oscillators provide increased stability and less variance due to line voltage changes.

AGC Control Knob disables AGC or selects two AGC decay time constants. This permits choice of AGC characteristics to suit operating conditions.

Concentric RF and Audio Gain Control arrangement on the 75S-3B receiver offers increased operating convenience.

Audio Output of 3.0 watts assures adequate speaker levels.

The Collins 75S-3B and 75S-3C are versatile receivers with exceptionally sharp selectivity and operation in any of three modes — SSB, CW and RTTY. AM reception is provided, and the passband can be optimized by the installation of an optional 3.1, 4.0 or 6.0 kHz Mechanical Filter. Two CW mode switch positions with optional plug-in filters offer up to three degrees of selectivity in the CW/SSB function.

The 75S-3B Receiver can be combined with the 32S-3 Transmitter and 312B-4 Station Control to make a completely integrated station. The 75S-3B, when used with the 32S-3, is capable of transceiver-type operation with the receiver PTO controlling the transmitting frequency. The 75S-3B can also be used conveniently with the Collins KWS-1, as well as the Collins KWM-1 or KWM-2 Transceiver.

Coverage outside the amateur bands, or additional 10 meter-band frequency coverage, can be obtained by plugging in the appropriate crystals.

The pitch for CW reception can be varied by turning the BFO control on and adjusting the knob for the most pleasing beat note, with the desired signal centered in the filter passband. The calibration marks can be used to shift from high mark to low mark when you are copying RTTY.

When the BFO knob pointer is at the 0 reference mark, the BFO frequency is approximately the same as crystal BFO in USB position. With the knob in the off position, the crystal BFO is in operation.

RTTY operation requires a conventional converter and printer. Fine tuning in this mode is easily accomplished with the variable BFO.

The 75S-3C is identical to the 75S-3B except that an additional HF crystal board and front panel selector switch are included. The board for additional crystals is located on the top of the chassis, and the standard group of amateur band crystals is mounted in a board on the underside of the chassis. Frequencies near range edges might require trimmer readjustment for proper operation.

Specifications

FREQUENCY RANGE:
80 meters — 3.4-3.6 MHz, 3.6-3.8 MHz and 3.8-4.0 MHz.
40 meters — 7.0-7.2 MHz and 7.2-7.4 MHz.
20 meters — 14.0-14.2 MHz and 14.2-14.4 MHz.
WWV — 14.8-15.0 MHz.
15 meters — 21.0-21.2 MHz, 21.2-21.4 MHz and 21.4-21.6 MHz.
10 meters — 28.5-28.7 MHz.
With optional crystals any 200 kHz range can be tuned from 3.4 to 30.0 MHz except 5.0 to 6.5 MHz.

MODE: Selectable USB, LSB, CW or AM.

TYPE OF SERVICE: Selectable single sideband, CW, RTTY and AM continuous.

POWER REQUIREMENTS: 115/230 v ac, 50-400 Hz. Power consumption is approximately 85 watts. Power can be provided by an external supply which delivers 185 v dc at 125 ma and −62 v dc at 5 ma. Filament power can be ac or dc as follows: 6-7 v at 5.5 amps, 12-14 v at 2.75 amps or 24-28 v at 1.4 amps.

HARMONIC AND OTHER SPURIOUS RESPONSE: Image rejection better than 50 db. Internal spurious signals below 1 uv equivalent antenna input.

AUDIO NOISE LEVEL: Not less than 40 db below 1 watt.

AMBIENT TEMPERATURE: 0°-50° C.

AMBIENT HUMIDITY RANGE: 0%-90%.

ALTITUDE: 0-10,000 ft.

PROTECTIVE DEVICES: 1 amp SB fuse in ac line.

SIZE: Receiver with feet — 14¾″ W, 7¾″ H, 12½″ D (37.47 cm W, 19.69 cm H, 31.75 cm D).

WEIGHT: 20 lbs. (9.07 kg).

CALIBRATOR: 100 kHz crystal oscillator.

FREQUENCY STABILITY: Within 100 Hz during any one-hour period following 20-minute warm-up. Not more than 100 Hz with ±10% line voltage variation.

CALIBRATION ACCURACY: 1 kHz after midband calibration.

BACKLASH: Not more than 50 Hz.

VISUAL DIAL ACCURACY: 200 Hz on all bands.

SENSITIVITY: 0.5 uv for 10 db signal-plus-noise-to-noise ratio in SSB mode.

SELECTIVITY: SSB — 2.1 kHz, 2:1 shape factor. CW — two switch positions and sockets; no filters supplied. AM — 5 kHz. Optional filters for 0.2, 0.5, 0.8, 1.5, 3.1, 4.0 or 5.0 kHz are available.

VARIABLE BFO: Tunes 452.35-458.35 kHz.

AUTOMATIC GAIN CONTROL: AGC threshold — 1.5-3.0 uv, 1.5 nominal. Selectable AGC time constant, Fast, Slow and Off. Attack time is 1 millisecond in both Fast and Slow. Fast release time is 190 milliseconds. Slow release time is 600 milliseconds.

AUDIO OUTPUT LEVEL: 1 watt at AGC threshold, 3 watts maximum.

ANTENNA INPUT: 50 ohms nominal ±50%.

AUDIO OUTPUT REQUIREMENTS: Speaker — 3-4 ohms. Headphones — 500 ohms or higher.

AUDIO DISTORTION: Not more than 10% at 1 watt.

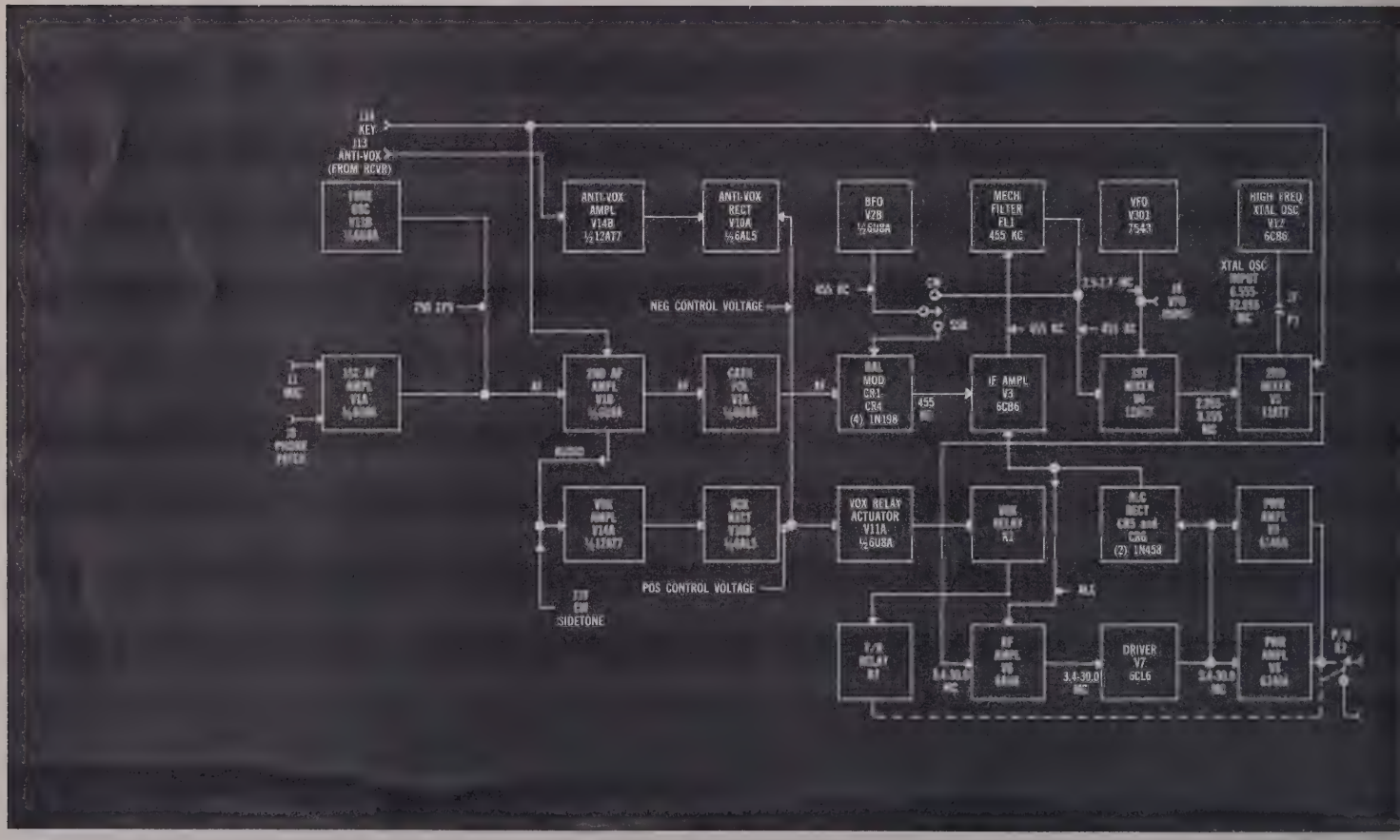
MUTING: Jack on rear apron requires ground-on-receive information from transmitter.

COLLINS

32S-3
Transmitter

32S3 $865.00

See page 6 for complete price list



A combination of features gives top performance found only in Collins transmitters. These features include:

Dual Conversion with the high frequency oscillator crystal-controlled, and low frequency oscillator variable, resulting in a frequency stability for Collins transmitters which has become the standard of the amateur field.

Automatic Load Control which aids in preventing overdriving the PA and provides up to 10 db compression for higher average talk power.

RF Inverse Feedback for improved linearity and reduction of distortion products and splattering.

CW Spotting Control which allows the 32S-3 frequency to be quickly and easily adjusted to zero beat with a signal tuned on the receiver. The carrier is momentarily keyed in the low level stages without disabling the receiver. A level control facilitates zero adjustment.

Collins Mechanical Filter providing a clean, clear signal without need for adjustment, additional audio filters or special microphones.

Collins' highly flexible 32S-3 Transmitter covers all the amateur bands between 3.4 MHz and 30.0 MHz with a power input of 175 watts PEP on SSB or 160 watts on CW. It has a nominal output of 100 watts.

The 32S-3 has a minimum number of controls to offer precise tuning.

The 32S-3 can also be adapted for RTTY operation because of the high degree of stability of the unit. For RTTY, the 516F-2 Power Supply and a source of external cooling air should be used.

Grid block keying in CW with adjustment of characteristic from "soft" to "hard" for individual operator is provided.

The 32S-3 comes equipped with the crystal sockets, crystals and bandswitch positions for eleven 200 kHz bands. Crystal sockets and bandswitch position also are provided for two additional 200 kHz bands between 28 MHz and 30 MHz. A fourteenth position, corresponding to the WWV position on the receiver, can be used for an additional 200 kHz band in the 9.5-15.0 MHz range, if desired. Regulation of oscillator voltages insures high frequency stability.

Plug-in crystals are available to convert any of the amateur band channels to out-of-band channels. Easy access is provided to crystal oscillator patch cables from top of cabinet. Front panel selection of receiver VFO or transmitter VFO provides optional transceiver operation at the flick of a switch.

While the 32S-3 provides ample RF power for excellent communication, it can be used without modification to excite the Collins 30L-1 or 30S-1 Linear Amplifier.

Specifications

FREQUENCY RANGE:
80 meters — 3.4-3.6 MHz, 3.6-3.8 MHz and 3.8-4.0 MHz.

40 meters — 7.0-7.2 MHz and 7.2-7.4 MHz.

20 meters — 14.0-14.2 MHz and 14.2-14.4 MHz.

15 meters — 21.0-21.2 MHz, 21.2-21.4 MHz and 21.4-21.6 MHz.

10 meters — 28.5-28.7 MHz.

With optional crystals, any 200 kHz range can be tuned from 3.4 to 30.0 MHz except 5.0 to 6.5 MHz.

MODE: SSB (either sideband selectable), CW or RTTY with 516F-2 Power Supply and external cooling air.

TYPE OF SERVICE: SSB continuous; CW 50% duty cycle.

POWER REQUIREMENTS: Power can be delivered by an external supply such as the 516F-2 which must furnish 800 v dc at 230 ma; 285 v dc at 175 ma; 6.3 v at 6 amps; and from −55 v to −80 v dc with no current requirement. Heater supply may also be 12.6 v at 3.0 amps or 25.2 v at 1.5 amps.

With the 516F-2, power consumption is approximately 130 watts in standby; 400 watts in full lock-key; and 270 watts in normal voice transmit.

PLATE POWER INPUT: 175 watts PEP on SSB; 160 watts on CW.

POWER OUTPUT: 100 watts PEP (nominal) into 50 ohms.

HARMONIC AND OTHER SPURIOUS RADIATION: Carrier suppression −50 db; unwanted sideband −50 db; oscillator feedthrough and/or mixer products −50 db except 3500 kHz, 40 db. Second harmonic −40 db. Third order distortion −30 db.

NOISE LEVEL: 40 db below single tone carrier.

AMBIENT TEMPERATURE: 0°-50° C.

AMBIENT HUMIDITY RANGE: 0%-90%.

ALTITUDE: 0-10,000 ft.

PROTECTIVE DEVICES: Primary fuses provided in the power supply to be used with the equipment. The PA cage is interlocked; the 6.3 v ac output is fused.

SIZE: Transmitter with feet — 14¾" W, 7¾" H, 12½" D (37.47 cm W, 19.69 cm H, 31.75 cm D).

WEIGHT: 16 lbs. (7.26 kg).

FREQUENCY STABILITY: Within 100 Hz during any one-hour period following 20-minute warm-up. Not more than 100 Hz with ±10% line voltage variation.

CALIBRATION ACCURACY: 1 kHz after midband calibration.

BACKLASH: Not more than 50 Hz.

VISUAL DIAL ACCURACY: 200 Hz on all bands.

OUTPUT IMPEDANCE: Variable, 50 ohms nominal, capable of matching up to 2:1 SWR.

CW SIDETONE: Provision for monitoring keying in receiver. Sidetone level is adjustable.

KEYING CHARACTERISTICS: Keying is free of chirp and clicks. Modified break-in CW provided. Keyed carrier used for CW keying. Envelope rise and decay time adjustable.

AUDIO INPUT: High impedance microphone or 312B-4,-5 phone patch.

AUDIO FREQUENCY RESPONSE: 300-2400 Hz nominal, determined by Mechanical Filter.

AUDIO COMPRESSION CHARACTERISTICS: ALC operates on IF and RF amplifiers and is capable of 10 db compression.

RF FEEDBACK: Approximately 10 db of RF feedback around PA and driver for improved PA linearity.

COLLINS

30L-1
Linear Amplifier

$520

This linear amplifier is completely self-contained and designed for table-top use. It is easily transported in a CC-2 Carrying Case. The Collins 30L-1 features:

Automatic Load Control allowing a high average level of signal and optimum power output from the amplifier, within the rated limits of distortion.

RF Inverse Feedback reduces distortion products giving cleanest signal on the air.

Solid State Rectifiers resulting in heat reduction.

Self-Contained Power Supply with safety interlock circuits for grounding the high voltage when the cover is removed.

Automatic Antenna Transfer On The On-Off Switch permits the 30L-1 to be switched in or out of the circuit at will by operating the switch.

The Collins 30L-1 Linear Amplifier has 1000 watts PEP power input on SSB and 1000 watts average on CW on all bands. It can be driven by the Collins 32S-3 Transmitter, the Collins KWM-2 Transceiver, or most 70-100 watt exciters. Finished in the same attractive light gray as Collins' famous S/Line equipment and the KWM-2, the 30L-1 has all the controls conveniently accessible on the front panel.

The 30L-1 provides SSB and CW emission and covers the 80, 40, 20, 15 and 10 meter bands. Provisions are made for general coverge use, too. Automatic load control voltage from the 30L-1 is fed back to the exciter, providing maximum talking power without overdriving and distortion. In combination with RF inverse feedback, automatic load control provides not only more power, but a sharper signal than any comparable unit in the amateur field.

The 30L-1 is a grounded grid linear amplifier with four 811A Triodes. They can be replaced without removing the unit from the cabinet. The 811A's are instantly heated; thus, there is no delay in warm-up.

Indicating devices on the 30L-1 include a panel meter monitoring final amplifier plate current, plate voltage, and tuning circuit. With the meter switch in tune position, the 30L-1 uses an exclusive comparator circuit which can be operated by simply adjusting tuning and loading controls to zero the meter.

The 30L-1's RF and power supply compartment covers operate safety interlock switches for protection of the operator. Cover removal closes these switches and shorts the high voltage to ground. This arrangement protects the operator from accidentally coming in contact with high voltage dc, which is present in either compartment.

The unit can be operated outside amateur band limits; however, retuning the input circuits may be necessary. Such retuning presents the proper load impedance to the exciter.

30L-1 SPECIFICATIONS:

By retuning input circuit as necessary, the following general coverage bands can be accommodated:

Frequency Band	Total Coverage
3.5 MHz	3.4-5.0 MHz
7.0 MHz	6.5-9.5 MHz
14.0 MHz	9.5-16.0 MHz
21.0 MHz	16.0-22.0 MHz
28.0 MHz	22.0-30.0 MHz

MODE: SSB or CW.

TYPE OF SERVICE: Attended operation SSB continuous; CW 50% duty cycle.

POWER REQUIREMENTS: 115 v or 230 v, 50-60 Hz; CW, key closed, 1200 watts ac; SSB, no signal, 300 watts ac; SSB, speech signal, 550 watts ac.

DRIVE POWER: 70-100 watts for full output.

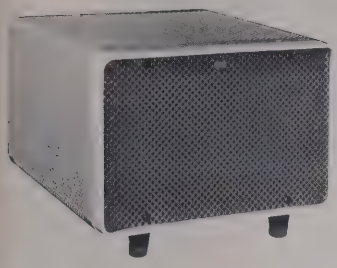
PROTECTIVE DEVICES: All removable panels interlocked. Input line fused — 8 amps on each side.

SIZE: With feet — 14¾″ W, 7¾″ H, 14″ D (37.47 cm W, 19.69 cm H, 35.56 cm D).

WEIGHT: 38 lbs. (17.24 kg).

OUTPUT IMPEDANCE: Variable. Nominally 50 ohms unbalanced with not more than 2:1 SWR on the amateur bands.

COLLINS ACCESSORIES — See PAGE 6 for prices



516F-2 AC Power Supply

The 516F-2 can be used with the 32S-3 and KWM-2, supplying all voltages for them; 115 v, 50-60 Hz, 400 Hz with minor changes. Size: 10″ W, 7¾″ H, 12″ D (25.4 cm W, 19.69 cm H, 30.48 cm D). Weight: 28 lbs. (12.7 kg).

312B-3 Speaker

The 312B-3 contains a 5″ x 7″ (12.7 cm x 17.78 cm) speaker and connecting cable and is styled to match the S/Line and KWM-2. Size: 10″ W, 7¾″ H, 8″ D (25.4 cm W, 19.69 cm H, 20.32 cm D). Weight: 4 lbs. (1.81 kg).

312B-4 Speaker Console

The 312B-4 integrates the 75S-3B, 32S-3, 30S-1 and accessories into an operating system. The KWM-2 and 30S-1 can also be integrated into an operating system by the 312B-4. A speaker, RF directional wattmeter with 200 and 2000 watt scales, and a phone patch are included in the console. Size: 10″ W, 7¾″ H, 12¼″ D (25.4 cm W, 19.69 cm H, 31.12 cm D). Weight: 8½ lbs. (3.86 kg).

312B-5 VFO Console

Designed for use with the KWM-2 in fixed station operation, the 312B-5 provides limited separation of receive and transmit frequencies, phone patching facilities and a directional wattmeter. It includes a 5″ x 7″ permanent magnetic speaker. The PTO control selector can be set as follows: (1) Receive KWM-2, Transmit 312B-5; (2) Transceive KWM-2; (3) Transceive 312B-5. Other control functions are Voice Operated, Receive Only, Transmit Only, Phone Patch On-Off, and Station Mute. Cables are furnished for connections to the KWM-2. Size: 10″ W, 7¾″ H, 12¼″ D

SM-3 Desk Top Microphone

The Collins SM-3 is a slender gray and brushed chrome desk-top unit that blends with other Collins station equipment. Featuring a push-to-talk switch built into the rubber-isolated base, the SM-3's omnidirectional characteristics provide excellent transmission for the amateur operator. Its frequency response — 200-3000 Hz — matches that of the S/Line and the KWM-2. It has an output level of −53 db. It is equipped with a five-foot Koiled Kord; the swivel permits vertical adjustment of 60 degrees.

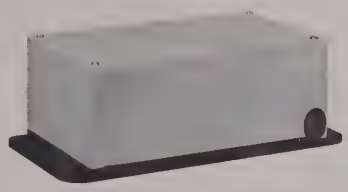
399B Novice Adapters

The 399B-4 is a crystal-controlled oscillator which is used for frequency control in place of the VFO in the 32S-3 Transmitter. Sockets are provided for four crystals which are selectable by switch. The 399B-5 is used in place of the VFO to control the transmit frequency in the KWM-2 Transceiver. The receiver remains PTO tuned. Crystals are not provided with either adapter.

Bandpass Filters

Plug-in filters are available for use in the 75S-3B Receiver to effectively reduce background noise by restricting the 455 kHz IF bandwidth to that necessary for communication. The F455FA series of Mechanical Filters is available in 500 and 800 Hz bandwidths for CW, 1500 Hz bandwidth for teletype, 2.1 kHz for SSB and 3.1, 4.0 or 6.0 kHz for AM applications.

The X455KQ-200 Crystal Filter with a 200 Hz bandwidth can be employed for maximum selectivity in CW.



MP-1 Mobile Power Supply

The MP-1 converts a 12-volt automobile, aircraft or boat battery to the voltages required for the Collins KWM-1, KWM-2 or KWM-2A. The MP-1 includes a high voltage supply for the transmitter PA, bias and a low voltage supply for the amplifier. Size: 5¾″ W, 3¾″ H, 11″ D (14.61 cm W, 9.53 cm H, 27.94 cm D). Weight: 7½ lbs. (3.4 kg).

351D-2 Mobile Mount

The 351D-2 provides secure mounting for the KWM-2 is most automobiles. Cantilever arms fold out of the way when the KWM-2 is removed. The connector at the right end is the power plug; the connector at the left end can be used for control of antennas having band switching circuitry. Cables 20 feet in length are attached to each plug.

440E-1 Cable

The 440E-1 is similar to the cable which is supplied with the Collins 351D-2 Mobile Mount. This cable can be used to connect the KWM-2 with the MP-1 or 516E-2 Power Supply when the mobile mount is not used.

MM-1 Mobile Microphone

The Collins MM-1 is a pressure-operated dynamic microphone designed to fit your hand comfortably. This mike is engineered for maximum voice response, and its die-cast case is finished in brushed satin chrome. With its mounting button on the front, the MM-1 slips easily into a dashboard bracket supplied with the mike. When the MM-1 is removed from the dashboard bracket, the microphone is in position for instant transmission. A five-foot length of Koiled Kord with mike plug is supplied with the 22-ounce microphone. The MM-1 has a frequency response from 200-10,000 Hz and has an output level of −48 db.

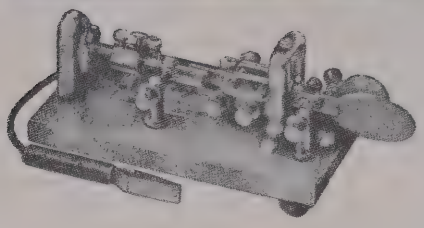
MM-2 Microphone

The Collins MM-2 includes a high impedance reluctance microphone and single earphone which can be used in either a fixed station installation or with a mobile unit. The MM-2 has a frequency response from 100-7,000 Hz and an output level of −50 db. In mobile use, the earpiece and microphone unit permit the driver to operate his car with both hands while carrying out radio voice communication. Although it weighs only 3½ ounces (0.099 kg), the Collins MM-2 is built to withstand the strenuous demands of daily mobile operation. Its microphone boom has a 360° adjustment making it possible to angle the mike to the best pickup position. The MM-2 Microphone has a magnetic stray field shield to exclude unwanted noises. For optimum reception of signals, an adjustable tone arm in the MM-2 pipes sound directly into the operator's right or left ear, but does not cover the ear as conventional earphones do. The MM-2 is equipped with both mike and phone plugs.

The Vibroplex

THE VIBROPLEX COMPANY INC. TRADE MARK

Telegraph & Wireless Transmitting Machines



New SUPER DE LUXE "PRESENTATION" VIBROPLEX

The Finest Bug Ever Built! 24K Gold-Plated Base Top, Patented Jewel Movement and Super-Speed Control!

New patented adjustable main spring affords wider range of speed than ever obtained before in semi-automatic transmitting key. Beautifully-designed with polished chromium precisioned machined parts mounted on a 24K gold-plated base top with colorful red switch knob, finger and thumb piece. This new Super-DeLuxe "Presentation" Vibroplex key affords a life-time of sending enjoyment. Harder than metal, the jewels in this key reduce friction, maintain smoother, easier operation and prolong life.

$43.95

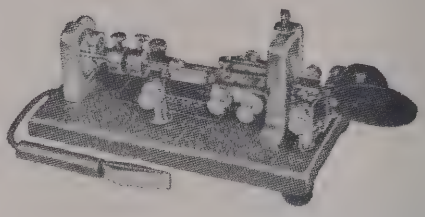
THE *Improved "ORIGINAL"* VIBROPLEX

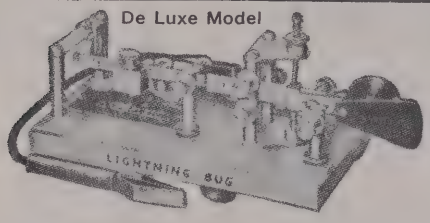
Suitable for All Classes of Transmitting Work Where Speed and Perfect Morse Are Prime Essentials

This great new Vibroplex is a smooth and easy working BUG. It has won fame on land and sea for its clarity, precision and ease of manipulation. Can be slowed down to 10 words per minute or less or geared to as high rate of speed as desired. Maintains the same high quality signal at whatever speed, insuring easy reception under all conditions. Weight, 3 lbs. 8 oz.

Standard—Chromium top parts, grey base. $27.50

DeLuxe—Chromium base and top parts, with jeweled movement. $32.95





De Luxe Model

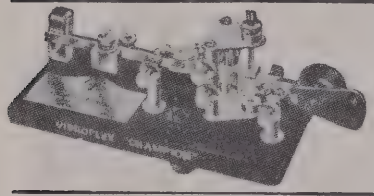
THE "LIGHTNING BUG" VIBROPLEX

High Quality Signals at All Speeds

Flat pendulum model. Weight 3 lbs. 8 oz.

Standard—Polished Chromium top parts, grey base. $25.95

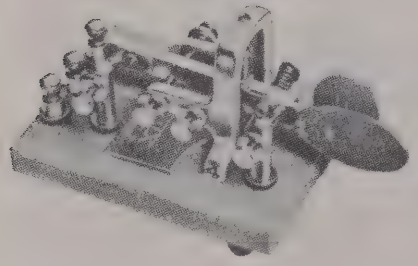
DeLuxe—Polished Chromium base and top parts, with jeweled movement. $32.95



THE "CHAMPION" VIBROPLEX

Weight 3 lbs. 8 oz. Without circuit closer. Standard finish only. Chromium finished top parts, with grey crystal base.

$21.95



VIBRO-KEYER *(New Listing)*

Over the years, we have had many requests for Vibroplex parts to be used for construction of a keying mechanism for an electronic transmitting unit. This beautiful and most efficient "Vibro-Keyer" is ideal for this job.

FEATURES OF THE "VIBRO-KEYER"

- Beautiful beige colored base, size 3½" x 4½", weight 2¾ pounds.
- Same large size contacts as furnished on Deluxe Vibroplex.
- Same main frame and super finished parts as Deluxe Vibroplex.
- Colorful red finger and thumb pieces.
- Has the same smooth and easy operating Vibroplex trunion lever.
- A real "Gem" adjustable to suit your own "taste".

$20.95 Deluxe Finish **$27.50**

VIBROPLEX CARRYING CASE

Keeps the Machine Free From:

Dust, Dirt & Moisture — Insures Safe-keeping when not in use.

A cloth-lined case, finished in handsome simulated black morocco. Has lock and key.

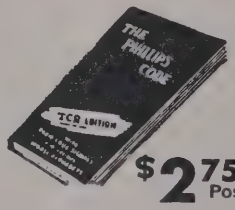
PRICE $8.00

Announcing the new edition of the

PHILLIPS CODE

SPECIAL EDITION Including:

- **Radio Code Signals**
- **International Morse**
- **American Morse**
- **Russian, Greek, Arabic, Turkish and Japanese Morse Codes**
- **World Time Chart**
- **United States Time Chart**
- **Commercial "Z" Code**
- **Aeronautical "Q" Code**



$2.75 Post Paid

• CORD & WEDGE AVAILABLE FOR ALL MODELS AT $2.75 ADDITIONAL •

GONSET

For the MOST WATTS per DOLLAR
in a LINEAR AMPLIFIER

★ 500 WATTS ★
on VHF

GREAT for VHF FM!

SAVE $25
See BONUS C on page 2

GONSET 903A Mk II & 913A Mk II VHF RF Power Amplifiers are identical except for frequency coverage. High efficiency design using a Blower Cooled 4X-150A Tetrode with a 500 watt input rating operates Class AB, linear for AM/SSB or Class C for CW/RTTY/FM. May be driven with any 5 to 10 watt exciter (attenuator pads are available for use with higher-powered drivers). Built-in Antenna Transfer Relay for transceive use, or may be wired for separate transmitter/receiver operation. Built-in SOLID STATE 115vac power supply. Dimensions: 8½" x 12-5/8" x 16". Weight: 60 pounds.

903A Mk II (2 Meters)..$355.00 913A Mk II (6 Meters)..$319.50

The following linears are as above – but do not have built-in antenna transfer relay:

903A (2 Meters) .....$299.50 913A (6 Meters)....$259.95

RF Attenuator (Specify 5, 10, or 15 db) .....each 12.95

SAVE $50 – See BONUS D on page 2

GONSET GSB-201 Mk III RF Linear Amplifier bandswitching 80-10 Meters with adjustable PI-network. Features four 572-B triodes in grounded grid. Rated at 2000 watts P.E.P. input SSB or 1000 watts CW and 600 watts AM. Antenna Transfer Relay Switching is included and may be connected for automatic switching with either a transmitter or transceiver exciter. A "standby" switch allows the linear to remain on while operating with the exciter only. Most 60-150 watt drivers are suitable. Built-in SOLID STATE 115vac power supply. Dimensions: 8½" x 12-5/8" x 17". Weight: 82 pounds. ..... (Bonus D)$375.00

GONSET GSB-201 Mk II – as above, but uses four economy 811's for 1500w SSB P.E.P., 1000w CW, 400w AM (input) $329.95

Replace those 811's with 572B heavy-duty triodes, for greater peak power capability & longer life....each $17.00

RAYTRACK

HORIZON VI L

2,000 WATT P.E.P. SIX-METER LINEAR AMPLIFIER

$595.00
INCLUDING POWER SUPPLY

SAVE $50 – See BONUS D on page 2

THE BIG ONE FOR "SIX"

HORIZON VI-L 6m Linear Amplifier is Ruggedly Built for Continuous Duty. Easily runs 2000 watts P.E.P. input SSB or 1000 watts CW/AM/RTTY. Two ZERO BIAS TRIODES (EIMAC 3-500Z) are operated in Class "B" (grounded grid) for excellent efficiency. May be driven to full output by currently available 100 watt P.E.P. transmitters. Adjustable ALC (negative feedback) is provided to control the exciter gain and allow the highest average power without peak clipping. An internal changeover relay feeds the antenna when on "receive", "standby", or when power is off. Standby switch allows the linear to remain "on" while operating the exciter only. Separate Heavy Duty 115/230vac Solid State power supply provides excellent dynamic and static voltage regulation. Dimensions: 13¼" x 8" x 14½". Weight: 29 lbs. (linear), and 35 lbs. (power supply) – supply included..... (Bonus D) $595.00

DX-2000L 80-10M Linear (same basic design features as the Horizon VI L) ..... (Bonus D)$649.00

Other Raytrack Products:

AutoLevel Electronic Volume Compressor.....$ 87.50

Horizon VI Low Noise 50 MHz FET Converter 14-18 MHz I.F... 59.95

DRAKE 4 LINE

R-4B RECEIVER

Versatility... Accuracy... Dependability...

● **Linear permeability tuned VFO** with 1 kc dial divisions. VFO and crystal frequencies pre-mixed for all-band stability ● **Covers ham bands** 80, 40, 20, 15 meters completely and 28.5 to 29.0 Mc of 10 meters with crystals furnished ● **Any ten 500 kc ranges between 1.5 and 30 Mc** can be covered with accessory crystals for 160 meters, MARS, etc. (5.0-6.0 Mc not recommended) ● **Four bandwidths of selectivity,** 0.4 kc, 1.2 kc, 2.4 kc and 4.8 kc ● **Passband tuning** gives sideband selection, without retuning ● **Noise blanker that works on CW, SSB, and AM** is built-in ● **Notch filter and 25 Kc crystal calibrator** are built-in ● **Product detector** for SSB/CW, **diode detector** for AM ● **Crystal Lattice Filter** gives superior cross modulation and overload characteristics ● **Solid State Permeability Tuned VFO** ● 10 tubes, 10 transistors, 17 diodes and 2 integrated circuits ● **AVC** for SSB or high-speed break-in CW ● **Excellent Overload and Cross Modulation characteristics** ● **Dimensions:** 5½"H, 10¾"W, 12¼"D. **Wt.:** 16 lbs.

$430.00

T-4XB TRANSMITTER

Use VFO of either R-4B or T-4XB for transceiving or separately.

● **Covers ham bands** 80, 40, 20, 15 meters completely and 28.5 to 29.0 Mc of 10 meters with crystals furnished; MARS and other frequencies with accessory crystals, except 2.3-3, 5-6, 10.5-12 Mc. ● **Upper and Lower Sideband** on all frequencies ● **Automatic Transmit Receive Switching on CW** (semi break-in) ● **Controlled Carrier Modulation for AM** is completely compatible with SSB linear amplifiers ● **VOX or PTT** on SSB and AM built-in ● **Adjustable Pi-Network Output** ● **Two 8-pole Crystal-Lattice Filters** for sideband selection, 2.4 kc bandwidth ● **Transmitting AGC** prevents flat topping ● **Shaped Grid Block Keying** with side tone output ● **200 Watts PEP Input on SSB**— 200 watts input CW ● **Meter indicates plate current and relative output** ● **Compact size; rugged construction** ● **Solid State Permeability Tuned VFO** with 1 kc divisions ● **Solid State HF Crystal Oscillator** ● **11 Tubes, 3 Transistors and 12 diodes** ● **Dimensions:** 5½"H, 10¾"W, 12¼"D. **Wt.:** 14 lbs.

$449.00

$750.00

including Power Supply

L4-B LINEAR AMPLIFIER

Built for continuous duty at full capacity

●**2000 Watts PEP-SSB;** 1000 Watts AM, CW, RTTY ● **Class B Grounded-Grid** — two 3-500Z Tubes ● **Broad Band Tuned-Input** for low distortion, high efficiency ● **RF Negative Feedback** gives lower distortion● **Transmitting AGC** for higher audio level without clipping ● **Directional Wattmeter** measures forward and reflected power ● **Two Tautband Suspension Meters** ● Plate Current Meter time constant is consistent with FCC Regulations ● **Solid state Power Supply** is separate ● **Quiet,** low-velocity, high-volume Blower ● The simple uncomplicated circuitry, the rugged tubes and the massive construction assures long, trouble-free life ● **L-4B** 13¹⁵⁄₁₆"W, 7⅞"H, 14⅝"D. **Wt.:** 32 lbs. ● **Power Supply:** 6¾"W, 7⅞"H, 11"D; **Wt.:** 43 lbs.

★★★★★★★ SAVE $50 ★★★★★★★

Purchase a New Drake R-4B, T-4XB, L-4B, TR-4 or TR-6 at the regular price with no trade-in, and you may take a $50.00 Credit toward the purchase of any other merchandise. (See Bonus D on Page 2.)

TR-4 80–10M TRANSCEIVER

GENERAL: ● **All amateur bands** 10 thru 80 meters in seven 600 kc ranges ● **Solid State VFO** with 1 kc dial divisions ● **Modes** SSB Upper and Lower, CW and AM ● **Built-in Sidetone** and automatic T/R switching on CW ● **30 tubes and semi-conductors** ● **Dimensions:** 5½"H, 10¾" W, 14⅜"D. **Wt.:** 16 lbs.

TRANSMIT: ● **VOX or PTT** on SSB or AM ● **Input Power:** SSB, 300 watts P.E.P.; AM, 260 watts P.E.P. controlled carrier compatible with SSB linears; CW, 260 watts ● **Adjustable pi-network.**

RECEIVE: ● **Sensitivity** better than ½ uV for 10 db S/N ● **I.F. Selectivity** 2.1 KHz @ 6 dB, 3.6 KHz @ 60 dB. ● **AGC** full on receive modes, variable with RF gain control, fast attack and slow release with noise pulse suppression ● **Diode Detector** for AM reception.

$599.95

TR-6 6M TRANSCEIVER

GENERAL: ● **Full coverage of 6 meter band** plus MARS 49.4 to 54.0 MHz (49.9 to 51.0 MHz with crystals supplied) ● **Solid State VFO** with 1 kHz dial divisions ● USB-AM-CW (LSB Filter is available) ● **Built-in sidetone** and automatic T/R switching on CW ● **19 tubes, 10 transistors, 12 diodes** ● **Dimensions:** 5¾"H, 10¾"W, 14¼"D **Wt.:** 15¾ lbs.

TRANSMIT: ● **VOX or PTT** on SSB and AM ● **Input Power:** 300 watts PEP on SSB and AM, 300 watts CW ● **Adjustable pi-network ● Plate/relative output and AGC metering**

RECEIVE: ● **FET front end,** less than 1/10 uV for 10 dB S/N ● **Selectivity** 2.1 kHz at 6 dB, front panel switching for accessory filters (CW, AM, LSB) ● **Diode and product detectors switchable** from front panel ● **Fast attack,** fast/slow release AVC system (switchable) ● **S-Meter** ● **IF input/output jacks** and interval switching for use with 2 meter transverters provided ● **Accessory Noise-blanker available**

$599.95

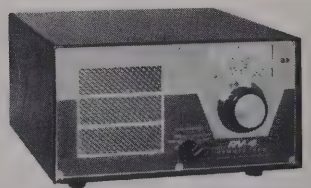
ACCESSORIES

MS-4 Spkr for R-4B, SW-4A, TR-4/6	$ 19.95
AC-4 AC Supply for T-4XB, TR-4/6	99.95
DC-4 12vdc Supply for TR-4/6	125.00
DC-24 24vdc Supply for TR-4/6	210.00
MMK-3 Mobile mtg bkt for TR-4/6	6.95
SR-729SR Mike for T-4XB, TR-4/6	17.00
RV-4 Remote VFO for TR-4	99.95
FF-1 Crystal control ad. for TR-4	24.50
34NB Noise Blanker kit for TR-3/4	129.00
RV-6 Revote VFO for TR-6	99.95
AM Plug-in Filter for TR-6	35.00
CW Plug-in Filter for TR-6	35.00
LSB Plug-in Filter for TR-6	35.00
9NB Plug-in Blanker for TR-6	95.00
Optional Crystals ..... each	5.00

Matching Speaker

MS-4 $19.95

5" x 7" heavy magnet speaker. Space for power supply. Wt. 6 lbs. Size: 5⅜"H, 10¾"W, 11⅛"D.



REMOTE VFO

A REMOTE VFO permits Receiving, Transmitting or Transceiver operation, on a different frequency (but in the same range) to which the Transceiver is tuned. Built-in 5" speaker. 3 ft. cable. Provides space for enclosing AC-4 power supply. 5-7/16" high, 10-3/4" wide, 11-7/8" deep. 8-1/2 pounds.

RV-4 Remote VFO for TR-4	$ 99.95
RV-6 Remote VFO for TR-6	99.95

Other R.L. DRAKE CO. Products

2C RECEIVER—$229.00

SAVE $25.00 - See Bonus C on page 2

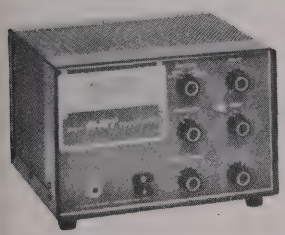
● **Triple Conversion** ● **Crystal-controlled First Converter** ● **500 kc ranges** for 80, 40, 20, 15 and 10 Meters ● **Also any 500 kc range** between 3.0 mc and 30 mc by inserting an accessory Crystal ● **Temperature-compensated VFO Tuning** ● **Selectable Sidebands** without retuning ● **Three Bandwidths**—.4, 2.4, 4.8 kc at 6 db ● **Solid-state** Audio, Product and AM Detectors, AVC Amp and Xtal Osc ● **AVC Switch** (Fast, Slow and Off) ● **SSB, AM and CW** with AVC and S-meter ● **Works Break-in CW** with 2-NT Xmtr ● **19 Tubes and Semi-Conductors** ● **Dimensions:** 11 5/16"W x 6 3/32"H x 9 3/32"D. **Wt.:** 13½ lbs.

Accessories available: 2AC 100 KHz Calibrator **$16.95, 2CS** Matching Speaker **$19.95, 2NB** Noise Blanker **$24.50, Crystals** for other ranges **$5.00 each.**

2-CQ Speaker/Q-Multiplier & Notch Filter

$39.95

Plugs into a socket on the 2-C to provide increased selectivity and notching out of interfering hetrodynes and other interfering signals. Necessary controls are mounted on the 2-CQ.



2NT CW TRANSMITTER

$149.00

SAVE $10 See Bonus B on Page 2

● **100 Watts Input** (can be reduced to 75 watts for novice) ● **Operates Break-in CW, Semi Break-in CW or Manual CW** with Drake 2-C or other receivers ● **Automatic Transmit Switching** ● **Side Tone Oscillator** built in ● **Antenna Change-over Relay** built in ● **Pi-Network output** with fixed loading ● **Lo Pass Filter** against TVI built in ● **Drop-out delay** of change-over relay adjustable ● **CW Coverage** on 80, 40, 20, 15, 10 Meters ● **Simplified Tuning** ● **Frequency Spotting** without xmtr output ● **Grid Block Keying** ● **Code Practice** in stand-by position ● 13 Tubes and Semi-Conductors ● **Dimensions:** 9⅞"W x 6 3/32"H x 9 3/32"D. **Wt.:** 12½ lbs.

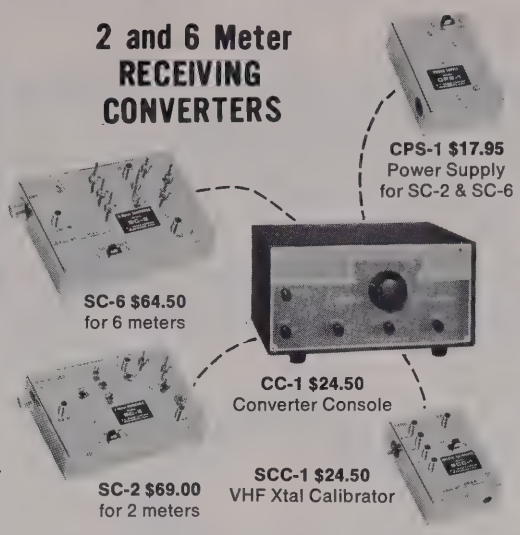
MATCHING NETWORKS

MN-4	MN-2000
$90.00	$175.00
200 watts	2000 watts PEP

General: ● **Integral Wattmeter** reads forward power in watts and VSWR directly; can be calibrated to read reflected power ● **Matches 50 ohm transmitter output** to coax antenna feedline with VSWR of up to 5:1 ● Covers ham bands 80 thru 10 meters ● **Size:** 5½"H, 10¾"W, 8"D (MN-2000, 14⅜"D) ● **Switches in or out** with front panel switch.

● **Continuous Duty Output:** MN-4, 200 watts; MN-2000, 1000 watts (2000 watts PEP) ● **MN-2000 only:** Up to 3 antenna connectors selected by front panel switch.

2 and 6 Meter RECEIVING CONVERTERS



CPS-1 $17.95 Power Supply for SC-2 & SC-6

SC-6 $64.50 for 6 meters

CC-1 $24.50 Converter Console

SC-2 $69.00 for 2 meters

SCC-1 $24.50 VHF Xtal Calibrator

General, SC-2 and SC-6: ● Low noise ● Improved cross modulation performance ● Uniform gain across band ● Entirely solid-state ● Zener regulated crystal oscillator ● Improved image rejection ● Low spurious response.

SCC-1 ● Crystal controlled 100 KHz FET Oscillator ● **Integrated circuit divider** gives 50 KHz markers up to 432 MHz.

CC-1 ● Has space for both 2 and 6 meter Converters, Power Supply, Crystal Calibrator and extra converter ● **Switch position** permits receiver to be used direct ● **Size:** 5⅜"H, 10¾"W, 8"D.

VHF Transmitting Converters

Designed for use with T-4XB, TR-4 or TR-6 and matching supply. TC-6 provides 300 watts input; TC-2 180 watts. Required injection signal may be obtained from Drake receiving converters.

TC-2 2m Transmitting Converter.....$300.00
TC-6 6m Transmitting Converter..... 250.00

Direct Frequency Dialing SW-4A

Short Wave Broadcast RECEIVER

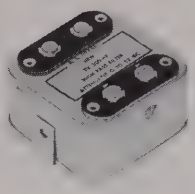
● Ultra-precision tuning dial accuracy ● Also accurately tunes standard AM Broadcast ● Crystal lattice filter for adjacent station rejection and good audio frequency response ● Dual conversion ● Solid state AF output gives low distortion good frequency response ● S-meter for signal strength indication ● Preselector gives superior sentitivity by peaking antenna and RF stages ● Crystal H. F. Oscillator for exceptional stability on all ranges ● Amplified AVC—gives constant AF output for all signal strengths.

FREQUENCY COVERAGE—.15-.5, .5-1.0, 1.0-1.5, 6.0-6.5, 7.0-7.5, 9.5-10.0, 11.5-12.0, 15.0-15.5, 17.5-18.0, 21.5-22.0, and 25.5-26.0 megacycles with crystals supplied. These frequencies cover European LF, American MF and International SW Broadcast Bands. **SIZE**—5½" high, 10¾" wide, cabinet depth 11⅝", overall 12¼". **WT.**—16 lbs.

$299.00

ACCESSORIES—Models MS-4 Speaker **$19.95** and **AL-4** Shielded Directional Loop Antenna for .5-1.5 MC **$19.95. Model AN-5** SW Antenna Kit **$8.00**

TVI FILTERS



TV-300-HP High Pass Filter

provides more than 40 db attenuation at 52 MC and lower. Protects the TV set from amateur transmitters 6 thru 160 meters.

$4.50

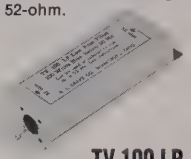
Drake Amateur Low Pass Filters

. . . have four pi sections for sharp cut-off between 6 meters and channel 2, and to attenuate xmtr harmonics falling in any TV channel and the FM band. 52-ohm.

TV-1000-LP

rated 1000 watts input, 200 watts on 6 meters. SO-239 connectors built-in.

$16.95



TV-100-LP

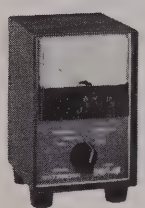
rated 100 watts input, 20 watts on 6. Solder it in or use your own SO-239's.

$5.95

$7.30

LN-4 Line Filter

Isolates transmitter or TV set from RF on power line. Attenuates 500 KHz to over 200 MHz. 125 VAC, 6 amps max.



RF Wattmeters

W-4 $49.50
2-30 MHz

WV-4 $73.50
20-200 MHz

Reads forward and reflected power directly in watts (VSWR from nomogram). Two scales in each direction. **Size:** 5½" H x 3¾" W x 4" D.

Model	Full Scale	Calibration Accuracy
W-4	200 watts	±(5% of reading + 2 watts)
	2000 watts	±(5% of reading + 20 watts)
WV-4	100 watts	±(5% of reading + 1 watt)
	1000 watts	±(5% of reading + 10 watts)

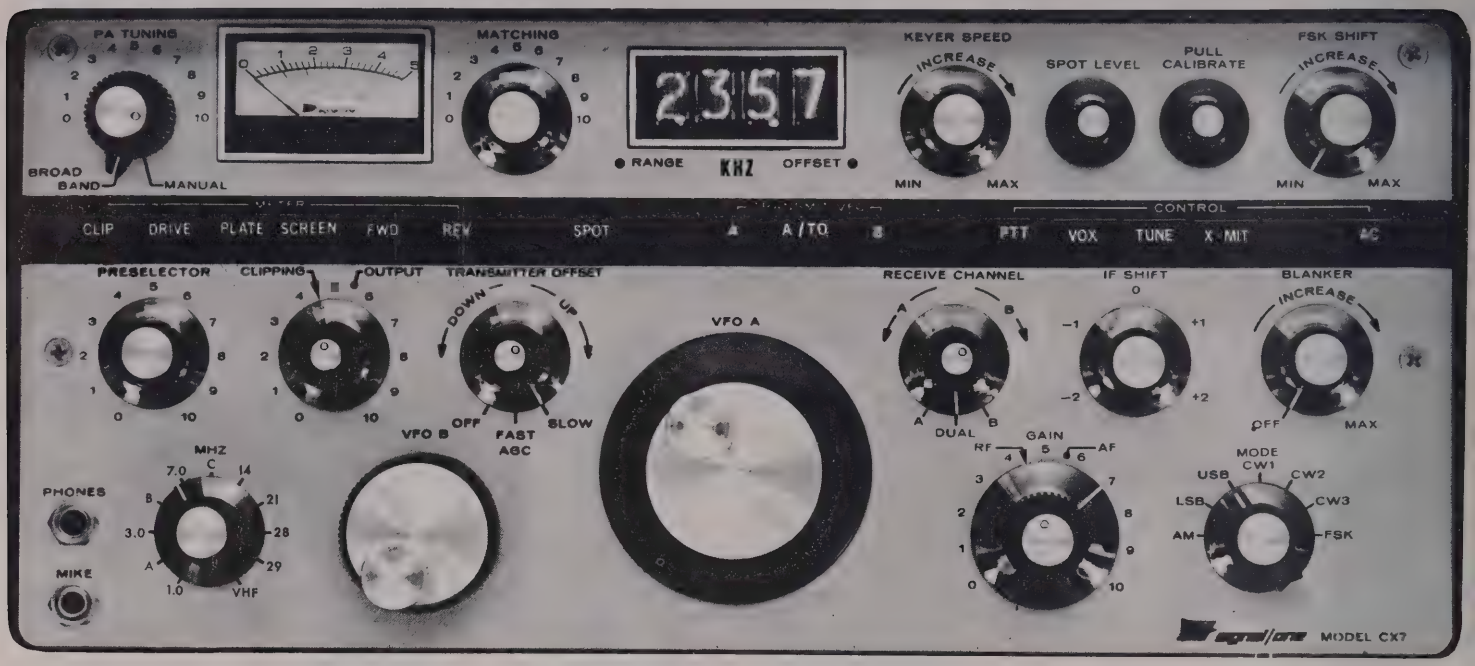
★ **Coming Soon** ★
C-4 Station Console
$295 (Tentative)

AMATEUR ELECTRONIC SUPPLY

4828 West Fond du Lac Avenue
Milwaukee, Wisconsin 53216
Phone (414) 442-4200

STORE HOURS: Mon. & Fri. — 9 am to 9 pm; Tues., Wed. & Thurs. — 9 am to 5:30 pm; Sat. — 9 am to 3 pm.

A New Criterion for the Next Decade...
the Deluxe Integrated Station



Preliminary Specifications -Model CX7

GENERAL

FREQUENCY COVERAGE: All amateur bands 1.8 - 30.0 MHz in full 1 MHz ranges. One additional 1 MHz band may be added in each of the three ranges, 2.0 - 3.0, 4.0 - 7.0 and 8.0 - 14.0 MHz, by supplying appropriate crystals.

VFO's: Identical permeability-tuned precision oscillators; 1 MHz tuning range with nominal 25 kHz per knob revolution.

READOUT: Accuracy, linearity, and resettability to 100 Hz at any point in any band after calibration at any 100 kHz checkpoint in that band. Integrated circuit digital frequency counter with miniature, high-intensity long-life Nixie display instantly shows actual frequency being received or transmitted.

SPOTTING: Push button provides audio beat note for spotting when using separate VFO's or Transmit Offset/ Transceive Mode.

STABILITY: Less than 100 Hz drift in first half-hour after turn-on; less than 50 Hz in any hour thereafter at fixed ambient.

T/R SWITCHING: Push-to-talk or fast-attack VOX; instantaneous break-in CW; fast key-up receiver recovery independent of AGC hang time. Isolated terminals for control of external amplifier.

CW KEYER: Built-in electronic keyer, 5-50 wpm. Separate jacks for keyer paddle and manual key.

FREQUENCY CONTROL MODES: Transceive with either VFO, "split" using both VFO's, transceive on either VFO plus independent receive-only on the other, or "Transmit Offset" transceive (transmit frequency tracks receiver and may be instantly offset up to plus or minus 3 kHz from receive frequency).

EMISSION MODES: SSB, CW, FSK, AM.

POWER SUPPLY: Built-in heavy-duty supply for 115/ 230 volts, 60 Hz. Silectron® transformer for exceptional regulation and power with very small size and weight. Requires approximately 100 watts receive, 400 watts peak at full input. 115/230 volt, 50-60 Hz export version available.

CONSTRUCTION: All critical circuitry (except P. A. and large power supply components) is modular on glass epoxy etched circuit boards.

SIZE AND WEIGHT: 16-1/4"w. x 7-1/4"h. x 14" deep overall, less feet. 25 pounds.

RECEIVING SYSTEM

ACTIVE DEVICES: Approximately 16 digital integrated circuits, 14 linear integrated circuits, 60 silicon transistors, one ceramic/metal P. A. tube.

SENSITIVITY: Better than 10 db signal-plus-noise-to-noise ratio for 1/3 microvolt input at 10 meters (2 kHz bandwidth).

SELECTIVITY: STANDARD (SSB) -- 2 kHz @ -6db, 1.5:1 (6:60 db) shape factor (two cascaded 8-crystal lattice filters). OPTIONAL (CW/FSK) -- 400 Hz with 4:1 shape factor, 300 Hz with 2:1 shape factor, 1200 Hz with 2:1 shape factor. Internal sockets for two optional filters; CW1 mode uses SSB selectivity, CW3 and FSK modes share one optional filter position.

ULTIMATE ATTENUATION: 80 db

IMAGE REJECTION: 80 db

IF REJECTION: 60 db

INTERNAL SPURS: Less than 1μv equivalent.

AGC: "Hang" type with selectable 100 ms or 1 second hang time; less than 6 db audio output change for signal level from 1 μv to 100 mv.

FRONT END DYNAMIC RANGE: A 10 microvolt desired signal will be modulated less than 10 % by an unwanted 10,000 μv signal 10 kHz away modulated 30% at 400 Hz, or by a similar 100,000 μv signal 5% removed.

AUDIO OUTPUT: 2 watts with less than 10% distortion.

IF SHIFT:* Actual IF adjustable up to plus or minus 2 kHz with respect to IF filter passband for interference rejection and receiver audio passband selection. Tracking error, zero.

DUAL RECEIVE:* Two channels usable separately or simultaneously; continuously variable relative RF gain control. Either channel may also be used for transceiving and the other for receive-only.

NOISE BLANKER: Pre-IF active blanker with adjustable threshold.

TRANSMITTING SYSTEM

TUNING: Pretuned bandpass output filter requires no adjustment when feeding nominal 50 ohm resistive load in amateur bands; manual tuning and loading for out-of-band or high SWR operation. Driver broadband 1.8 - 30.0 MHz.

POWER AMPLIFIER: Solid state, completely broad-band driver; rugged, ceramic-metal 8072 tetrode final amplifier conduction-coupled to massive extruded heat sink. 150 watts continuous dissipation rating at 25° C ambient.

POWER LEVEL: Nominal 300 watts PEP input, 150 watts PEP output all bands and modes. Output continuously adjustable down to less than 1 watt.

DUTY CYCLE: Continuous at full rated PEP input all modes.

CARRIER AND UNWANTED SIDEBAND SUPPRESSION: 60 db.

DISTORTION: Third-order intermodulation products more than 30 db below each of two equal tones at full rated output.

SPEECH PROCESSING: RF envelope clipper plus cascaded 8-crystal filters in SSB and compatible AM (USB with carrier) modes. Clipping adjustable 0-20 db nominal.

METERING: Clipping, drive level, plate and screen currents, forward and reflected RF power.

OPTIONAL ACCESSORIES

OPTIONAL ACCESSORIES: Standard and ultra-sharp CW filters, RTTY filter; available with CX7 or add-on later.

COMING SOON: Station console, miniature remote control head, mobile mount and DC inverter, general coverage (1.8 - 30.0 MHz) adapter, six and two meter transverter, carrying case ---

AND --- A UNIQUE NEW POWER AMPLIFIER TO COMPLETE THE "DELUXE INTEGRATED LEGAL-LIMIT STATION" -- Compact, rugged, versatile, and quiet

SIGNAL/ONE

SIGNAL/ONE is a Division of Electronic Communications, Inc. -- long a leader in the development and manufacture of advanced communications and control equipment and systems for government and industrial users. The sophisticated engineering and superb quality of SIGNAL/ONE products reflect their aerospace heritage. The backing of ECI -- one of the nation's one hundred largest electronics corporations and itself a subsidiary of world-wide, billion-dollar NCR -- provides the management and financial stability essential to sound growth and customer peace of mind. Yet the physical and operational separation of SIGNAL/ONE from the parent company permits a thoroughly competitive cost structure and devotion of undivided attention to the needs of amateur radio!

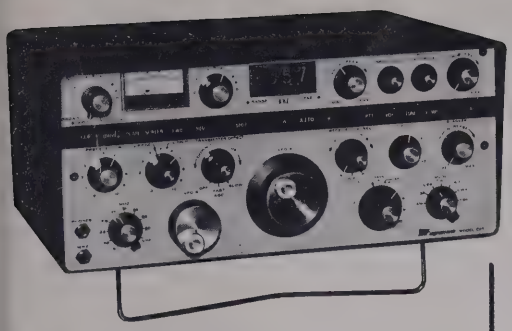
USER-ORIENTED DESIGN by engineers with long personal experience in ham radio - sophisticated application of up-to-the-minute technology -- direct personal service from inquiry through follow-up service -- these are some of the major reasons why SIGNAL/ONE offers amateur radio's greatest operating pleasure -- and best long-term investment value.

CX7 . . $1595.00

Optional standard CW filter..... 50.00
Optional deluxe CW filter 135.00

signal/one

signal/one - CX7 FEATURES . .

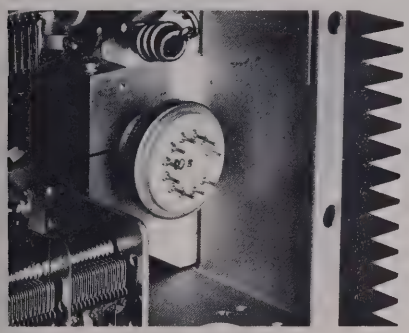


RF ENVELOPE CLIPPING delivers clean, crisp SSB with the talk power that no other type of speech processing can match. None of that mushiness typical of audio clipping and compression . . . This signal **penetrates**!

POST-CLIPPER PEAK OUTPUT CONTROL allows instant level adjustment for proper drive to any linear, and preserves signal quality right down to a watt or less!

HIGH EFFECTIVE POWER OUTPUT . . . 300 watts PEP input combined with the high **average** power content of RF-clipped SSB makes the CX7 sound more like a KW . . . or several, when it's followed by a linear.

RUGGED CONDUCTION-COOLED FINAL AMPLIFIER has ample reserve power dissipation capability to run all day at full rated input . . . even on FSK. No more "key down" time limits. And its linearity is excellent.



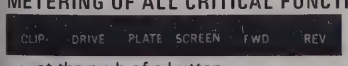
The beryllia coupler block provides excellent electrical insulation, yet transfers anode heat to the extruded heat sink as efficiently as would a metallic aluminum block. The tube just loafs along, **cool** and **linear**.

STATE-OF-THE-ART CW . . . at last!

- ■TRUE BREAK-IN (not just VOX)
- ■RAZOR-SHARP SELECTIVITY options
- ■INSTANT SPOTTING with either . . .
  - •SPLIT FREQUENCY (dual VFO's) or
  - •UNIQUE VARIABLE OFFSET, which lets you enjoy all the convenience of transeiving on CW, yet you can set the transmitter up to 3 kHz above or below the receiver with a flick of the wrist!

- ■CAREFULLY SHAPED RF carrier keying
- ■BUILT-IN DIGITAL KEYER

METERING OF ALL CRITICAL FUNCTIONS



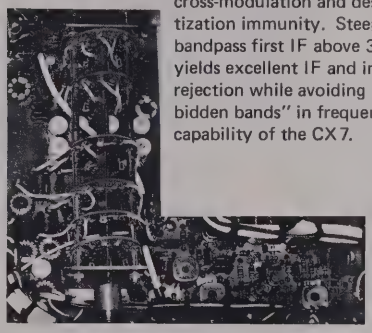
. . . at the push of a button.

FREEDOM FROM CLUTTER . . . with all the essential "accessories" built in, there's no need for a tangle of patch cables.

EVERYTHING YOU NEED for flexible, high performance communications . . . in one sleek cabinet! (Just add an antenna and mike or key.)

HEAVY ALUMINUM CABINET and chassis, textured baked-epoxy enamel finish.

DUAL-GATE MOSFET FRONT END provides outstanding sensitivity plus exceptional resistance to overload. Toroidal preselector helps achieve superb cross-modulation and desensitization immunity. Steep-skirted bandpass first IF above 30 MHz yields excellent IF and image rejection while avoiding "forbidden bands" in frequency capability of the CX7.



SPECTACULAR SELECTIVITY from **two cascaded** crystal filters is located **ahead of** most receiver gain, further enhancing dynamic range. Optional filters for CW or FSK are cascaded with one SSB filter, insuring unprecedented skirt selectivity and ultimate rejection in **all** modes.

IF SHIFT* control lets you move the received signal plus or minus 2kHz from nominal within the extremely steep-skirted IF filter passband to slice away QRM . . . attenuate a heterodyne by 50 db without affecting a desired signal only 500 Hz away!

HANG AGC levels out wide swings in signal strength, yet doesn't "pump" on normal conversation. Selectable "hang" time.

PRE-IF NOISE BLANKER gets to impulse noise before it can get to critical selective circuitry.

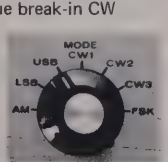
ALL HAM BANDS from 160 through 10 meters in full 1 MHz ranges plus overlap for MARS, WWV.

THREE SPARE BANDS for AF MARS, SWL, marine or other special use. 1.8 - 30 MHz CONTINUOUS with "General Coverage Adapter" (to be announced).

SIX AND TWO METERS with full CX7 capabilities using "VHF Adapter" (to be announced).

ALL POPULAR MODES of operation . . .

- ■Upper and Lower sideband
- ■True break-in CW



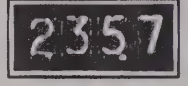
- ■Compatible AM for VHF convenience
- ■FSK MODULATOR PLUS IF Shift* allows use with popular 2125/2975 Hz frequencies.

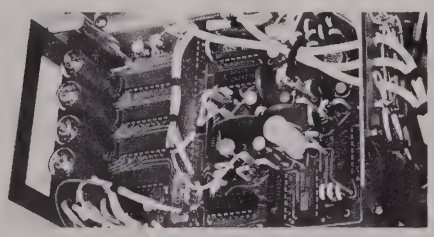
PUSH-BUTTON SPOTTING lets you instantly check exact transmit frequency . . . read it at a glance . . . hear an audible beat if it's within 3 kHz of the receive frequency.

FAST, SILENT DIGITAL VOX means no more clanking relays or clipped syllables - designed to be **used**.

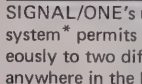
INSTANT BAND CHANGE without tuneup is made possible by the CX7's broadband driver and bandpass P. A. output filters pretuned for each ham band from 160 through 10 meters. Yet badly mismatched or reactive loads (into which no broadband amplifier can deliver full power output and linearity) may be manually matched in a few seconds. Manual tuning also permits normal operation outside amateur bands.

DIRECT, INSTANTANEOUS FREQUENCY READOUT TO 100 Hz from the built-in integrated circuit digital counter. No more squinting, extrapolating, interpolating or ambiguous dial readings. The display shows exactly where you are - transmitting or receiving - instantly.



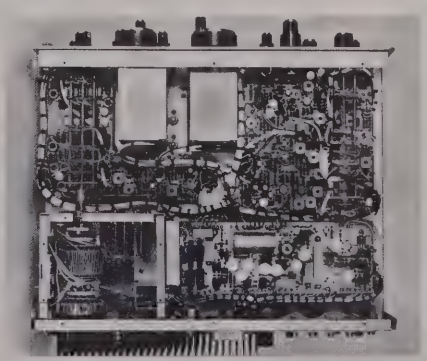


TRANSCEIVER-PLUS-RECEIVER PERFORMANCE with two identical precision VFO's, each tuning a full 1 MHz range plus ample end overlap for MARS, etc. SIGNAL/ONE's unique dual-receive system* permits listening simultaneously to two different frequencies anywhere in the band, with **relative** RF gain control - essential to avoid suppression of a weak signal by a stronger one. And you can transmit on either frequency, too.



INSTRUMENT GRADE COMPONENTS throughout . . . silicon semiconductors, long-life Nixies, rugged ceramic switches in P. A., taut-band meter . . .

GLASS EPOXY ETCHED CIRCUIT BOARDS . . .



Same G-10 material used in military and space equipment . . . designed and manufactured by experts.

SWAN Cygnet

SAVE $50

SEE BONUS D ON PAGE 2

A Complete Amateur Radio Station in One Portable Package

A 5 BAND 260 WATT SSB TRANSCEIVER WITH BUILT–IN AC–DC SUPPLY AND LOUDSPEAKER

The Swan Cygnet portable single sideband transceiver is designed to provide you with efficient, high quality communications with a high degree of reliability and performance. Its surprisingly low cost is a result of our continuing program of value analysis, and value engineering.

The Cygnet is a complete amateur radio station for only $395. It includes a built-in power supply for both A.C. and D.C. operation, loudspeaker, and push-to-talk microphone. Full coverage of the 10, 15, 20, 40 and 80 meter amateur bands is provided by the Cygnet with 260 watts P.E.P. in single sideband mode, and 180 watts CW input. Simply connect an antenna and you have the world at your fingertips.

The lightweight compact design of the Cygnet makes it an ideal travelling companion. You can take it with you on vacation or business trip, and operate from your motel room, summer cabin, boat or car. All you do is connect to a power source and antenna, and you're on the air.

For the newly licensed amateur, the Cygnet provides a complete amateur radio station at a minimum investment.

The Swan Cygnet is the most versatile and portable transceiver on the market, and certainly the best possible value.

SWAN CYGNET MODEL 260

$435

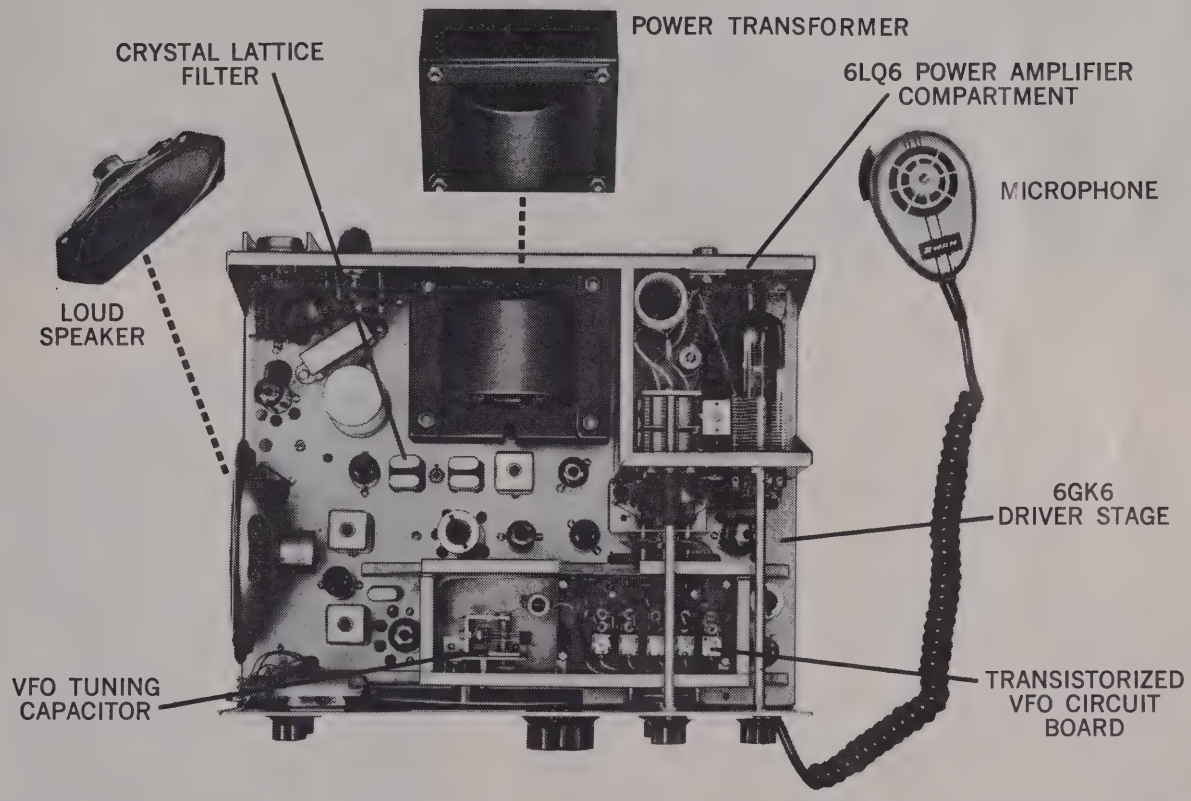
Amateur Net Price . . . . . .

SWAN CYGNET MODEL 260 SPECIFICATIONS

TRANSMITTER POWER: 260 WATTS SSB P.E.P. INPUT, 180 WATTS CW INPUT • 6LQ6 P.A. TUBE • FREQUENCY RANGE: 3.5–4.0 mc, 7–7.3 mc, 14–14.35 mc, 21–21.45 mc, 28.0—29.7 mc • OPERATES ON NORMALLY USED SIDEBAND • HIGH FREQUENCY CRYSTAL LATTICE FILTER COMMON TO TRANSMIT AND RECEIVE CIRCUITS: 2.7 KC BANDWIDTH • OVERALL AUDIO BANDPASS ESSENTIALLY FLAT FROM 300 TO 3000 CYCLES • SIDEBAND SUPPRESSION: 45 db • CARRIER SUPPRESSION: 60 db • THIRD ORDER DISTORTION: APPROX. —30 db • OUTPUT CIRCUIT: WIDE RANGE Pi COUPLER • GRID BLOCK CW KEYING WITH OFFSET FREQUENCY • TRANSISTORIZED VFO, TEMPERATURE AND VOLTAGE STABILIZED • RECEIVER SENSITIVITY BETTER THAN .5 μv for 10 db SIGNAL—PLUS—NOISE TO NOISE RATIO • PANEL CONTROLS: RECEIVER GAIN, BAND SELECTOR, DRIVER, P.A. PLATE, P.A. LOAD, VFO TUNING, TUNE—CW SWITCH • 5½ IN. HIGH, 13 IN. WIDE, 11 IN. DEEP, 24 LBS. WEIGHT.

AMATEUR NET **$435**

MOBILE MOUNTING BRACKET. UNIVERSAL DESIGN FOR INSTALLING TRANSCEIVER ON TRANSMISSION HUMP, OR UNDER DASH..... **$12**



NOTE: Approximately October 1, 1969 microphones will no longer be provided with Cygnet 260's.

DELUXE CYGNET MODEL 270 was just announced as this catalog was going to press. This model will be similar to the standard model 260 but with following additional features:

(1) C-F Networks Filter, (same as is used in the 500-C). (2) 100 kc crystal calibrator. (3) Dial Set control. (4) S-Meter and Transmit Metering. (5) AGC and ALC. (6) AF and RF gain controls. (7) Sideband selector. (8) Mic. Gain and Carrier Balance panel controls. (9) Mic. Jack on panel. (10) Vox socket providing for plug-in of VX-2 accessory. Tentative amateur net price (less microphone) is $525.00

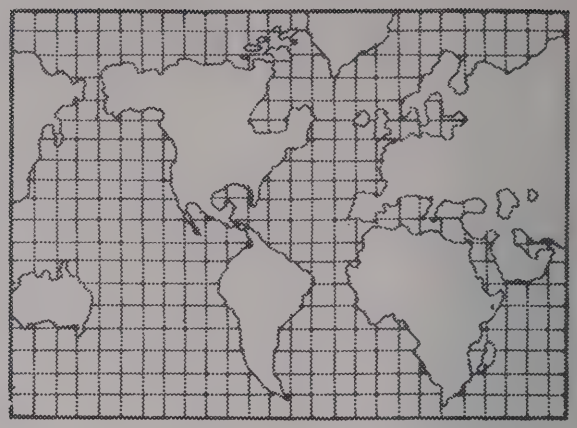
NEWEST, DELUXE ADDITION TO THE SWAN LINE

SWAN 500C

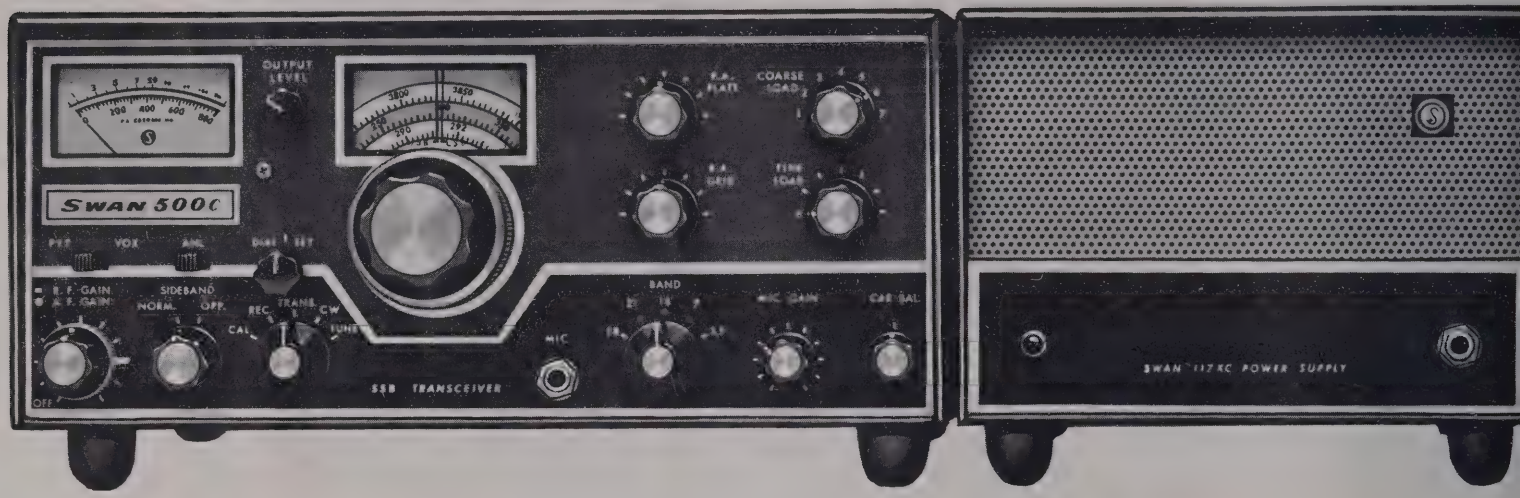
SSB-CW-AM TRANSCEIVER

5 BANDS-520 WATTS

HOME STATION • MOBILE • PORTABLE



SAVE $50 - See BONUS D on page 2



The new Swan 500C offers you higher power, improved styling, and many new deluxe features yet maintains the same high standards of performance, rugged reliability and craftsmanship that have become the trademark of the Swan Line. Backed by a full year warranty and a service policy second to none, we feel the Swan 500C will establish a new standard of value for the industry.

$565

RAY SEZ: "Why so much new SWAN in stock?" Simple! SWAN makes GREAT transceivers and AMATEUR ELECTRONIC SUPPLY is a GOOD place to do business with. The demand created by the SWAN and AES Combination requires a huge inventory of Factory-Fresh equipment to insure prompt delivery.

AMATEUR ELECTRONIC SUPPLY

4828 W. Fond du Lac Ave. Milwaukee, Wis. - 53216 Ph. (414) 442–4200

MILWAUKEE STORE HOURS: Mon & Fri - 9 am to 9 pm – Tues, Wed, Thurs - 9 am to 5:30 pm – Sat - 9 am to 3 pm.

THE NEW

SWAN

500 C

SSB-CW-AM TRANSCEIVER

SPECIFICATIONS

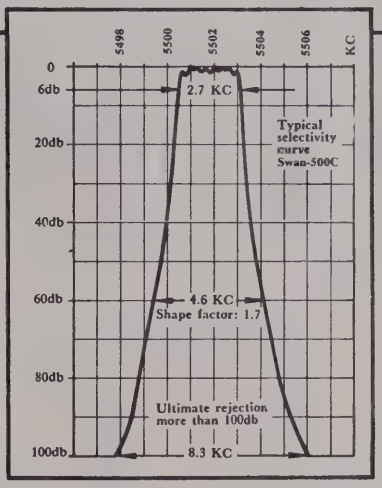
TRANSMITTER POWER: 520 WATTS SSB PEP INPUT, 360 WATTS CW INPUT, 125 WATTS AM INPUT • TWO 6LQ6 P.A. TUBES • FREQUENCY RANGE: 3.5-4.0 mc, 7-7.45 mc, 14-14.45 mc, 21-21.45 mc, 28.0-29.7 mc • EXTENDED FREQUENCY COVERAGE PROVIDES FOR MARS OPERATION WITH EXTERNAL CRYSTAL OSCILLATOR • HIGH FREQUENCY CRYSTAL LATTICE FILTER COMMON TO TRANSMIT AND RECEIVE CIRCUITS: 2.7 KC BANDWIDTH • OVERALL AUDIO BANDPASS ESSENTIALLY FLAT FROM 300 TO 3000 CYCLES • SIDEBAND SUPPRESSION: 50 db • CARRIER SUPPRESSION 60 db • THIRD ORDER DISTORTION: 30 db • SELECTABLE UPPER AND LOWER SIDEBAND • OUTPUT CIRCUIT: WIDE RANGE Pi COUPLER, COARSE AND FINE ADJUSTMENT • TRANSMITTER ALC WITH AUDIO COMPRESSION • GRID BLOCK CW KEYING, OFFSET FREQUENCY • BUILT-IN SIDETONE CW MONITOR • BREAK-IN CW OPERATION WHEN VX-2 ACCESSORY IS INSTALLED • TRANSISTORIZED VFO, TEMPERATURE AND VOLTAGE STABILIZED • PRECISION DUAL-RATIO TUNING • RECEIVER SENSITIVITY BETTER THAN .5 μv FOR 10 db SIGNAL-PLUS-NOISE TO NOISE RATIO • AMPLIFIED AGC SYSTEM. S-METER FUNCTIONS AUTOMATICALLY WHEN RECEIVING • AUTOMATIC NOISE LIMITER • 100 KC CRYSTAL CALIBRATOR • EXTERNAL VFO AVAILABLE FOR SEPARATE FREQ. CONTROL • FACTORY INSTALLED ACCESSORY SOCKET FOR ADDITION OF MODEL 508 EXTERNAL VFO • PANEL CONTROLS: RECEIVER A.F. GAIN, RECEIVER R.F. GAIN, FUNCTION SWITCH, ANL SWITCH, PTT-VOX SELECTOR, MIC. JACK, BAND SELECTOR, MIC. GAIN, CARRIER BALANCE, P.A. PLATE, P.A. GRID, P.A. LOAD, COARSE AND FINE DIAL SET • 5½ IN. HIGH, 13 IN. WIDE, 11 IN. DEEP, 15 LBS. WEIGHT

HOME STATION · MOBILE · PORTABLE

WHAT MAKES SWAN'S AUDIO QUALITY SO DEFINITELY SUPERIOR?

SWAN'S HIGH FREQUENCY CRYSTAL LATTICE FILTER

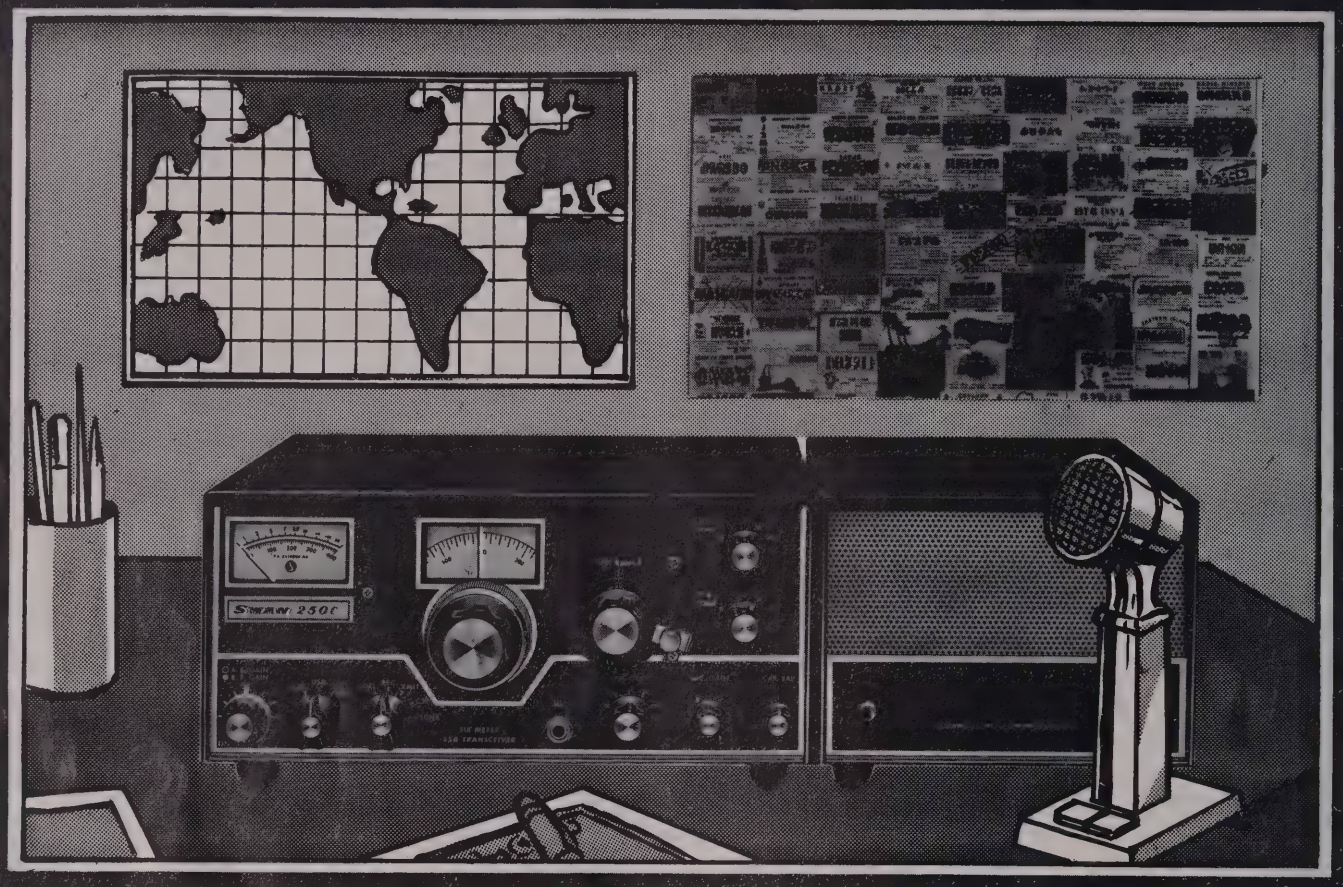
There are 3 important factors about a filter which determine what the overall selectivity will be. One of these is its bandwidth at the 6 db points, and here we have carefully selected 2.7 KC in order to give you good channel separation, and still retain the smooth, natural audio for which Swan transceivers are so well known.



The next consideration is shape factor, or the ratio between bandwidths at 6 and 60 db. In this respect the Swan filter gives you a "shape factor" of 1.7 to 1. This is substantially better than the 2 to 1 ratio of the mechanical filter, or 3 to 1 of the average 9 mc crystal filter. Best shape factors are achieved right around 5 mc, and this is one of the main reasons for selecting 5500 KC for the Swan I. F. (This choice of I. F. also permits single conversion design which results in fewer images and spurious signals. The only thing better than single conversion is no conversion at all.) The third important factor, but by no means the least, is the measure of ultimate rejection, or how far the skirts fall before flaring out. Take a look at the graph and you'll see that this is better than 100 db with the Swan filter! Ultimate rejection determines how well your receiver attenuates those strong adjacent channel signals, especially the guy down the street with the big linear. In this respect, the Swan filter is superior to others being used in amateur sideband gear.

SWAN
ELECTRONICS
A Subsidiary of Cubic Corporation

6 meters never sounded better



SAVE $50 - See BONUS D on page 2

VHF SWAN 250C

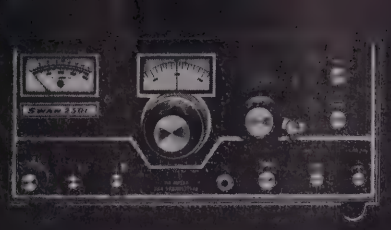
SSB–CW–AM TRANSCEIVER

FOR 6 METERS–240 WATTS P.E.P.

Engineered to provide the same excellent voice quality, power, and performance that have become the trademark of all Swan transceivers. With the Swan 250C, there is practically no limit to the operating pleasure you can find in the 6 meter VHF band.

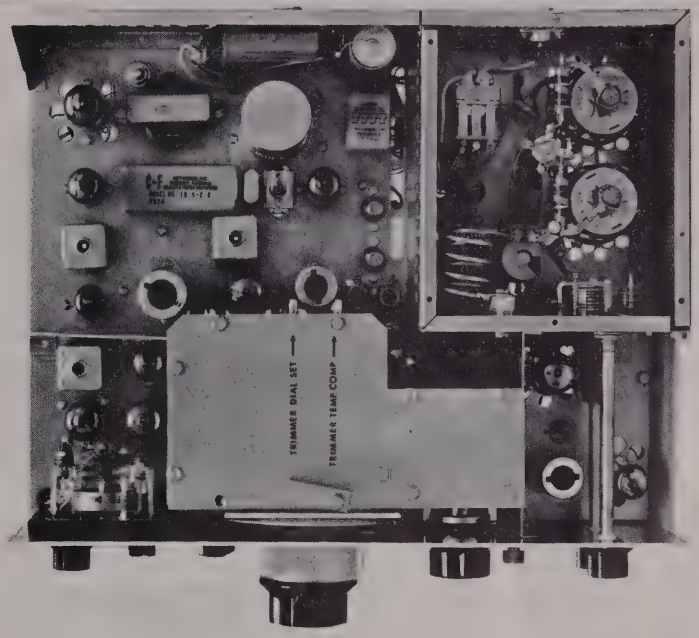
$450

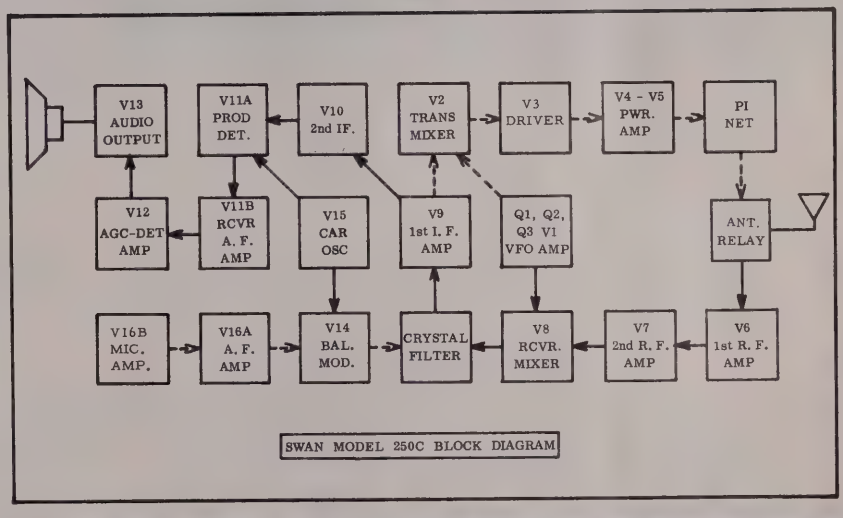
SWAN 250C



SPECIFICATIONS

- Frequency Range: 50-54 MC
- Power Rating: 240 watts PEP Input in SSB mode, 180 watts CW Input, 75 watts AM input
- Two 6146 B Power output tubes
- Distortion Products: down approx. 30 db
- Unwanted Sideband: down more than 40 db
- Carrier Suppression: better than 50 db
- Receiver Noise Figure: Better than 3 db, with two 6CW4 nuvistors in Cascode
- Selectivity: 2.8KC at 6 db down, with crystal lattice filter at 10.9 MC.
- Antenna Matching: Wide range Pi network
- Metering circuits: S-meter on Receive mode, P.A. Cathode Current and relative output in transmit mode
- 250 KC Crystal calibrator
- Selectable upper and lower sideband
- Receiver Mode switch provides for AM reception
- Accessory sockets for noise silencer, external VFO and VOX unit



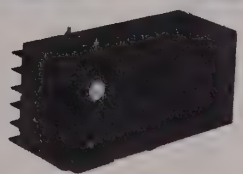


SWAN MODEL 250C BLOCK DIAGRAM

ACCESSORIES:

MATCHING AC POWER SUPPLY
with speaker.
Model 117-XC **$105**

EXTERNAL VFO
Matching unit provides for separate transmit and receive frequency control. Includes selector relay and switch.
MODEL 210 .....**$120**



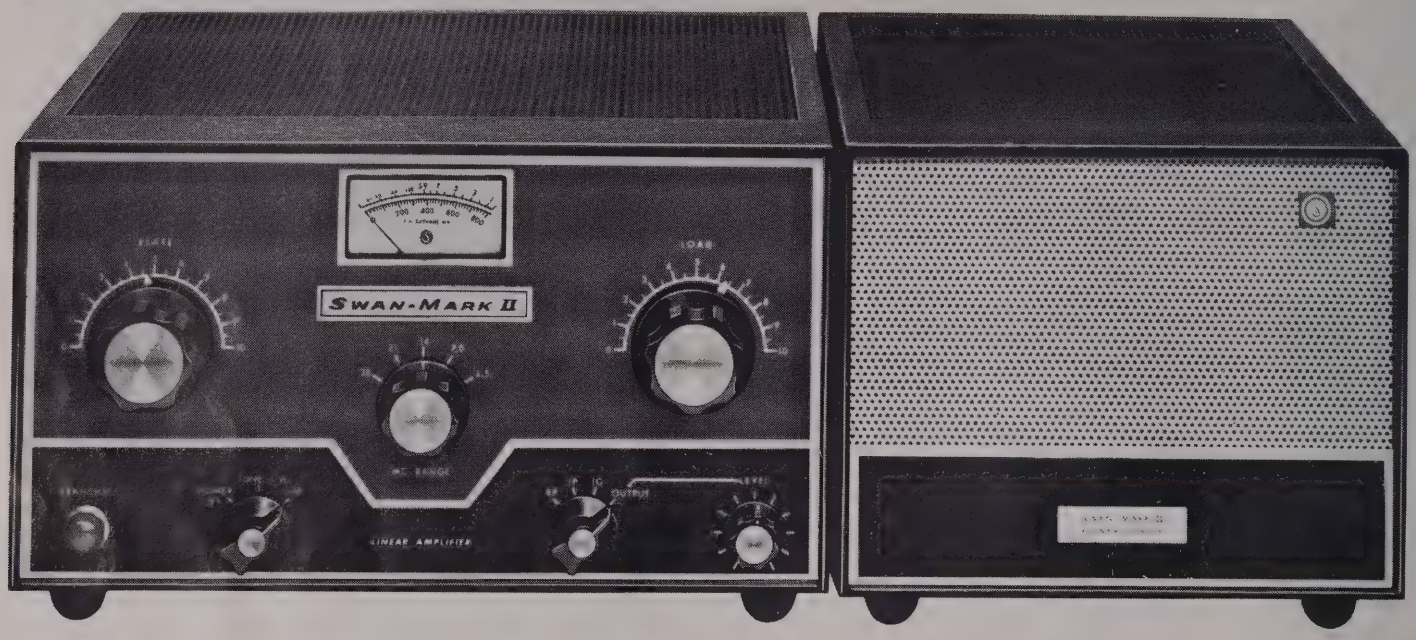
12 VOLT DC POWER SUPPLY
MODEL 14-117 . . .**$130**

PLUG-IN VOX UNIT
Model VX-2 .....**$35**

SWAN
ELECTRONICS
A Subsidiary of Cubic Corp

80 – 10m

SWAN MARK II
LINEAR AMPLIFIER

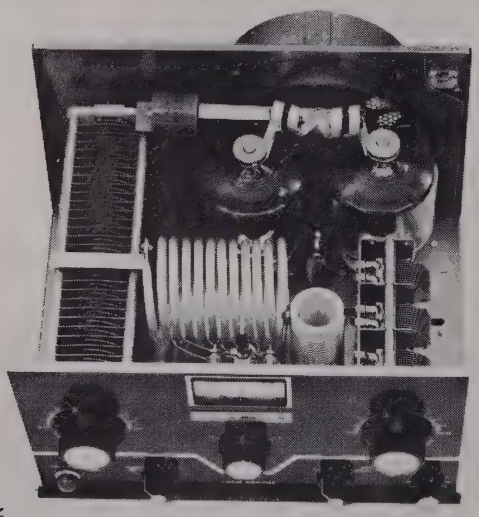


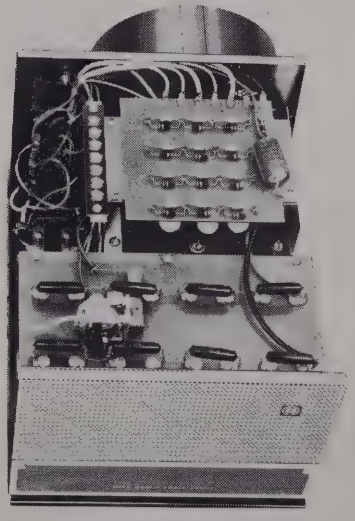
SWAN MARK II LINEAR AMPLIFIER
2000 WATT P.E.P. with Tubes: **$395**

MATCHING POWER SUPPLY **$235**

SAVE $50

Purchase any new Swan Linear Amplifier at the regular price with no trade-in and you may take a $50.00 Credit toward the purchase of any other merchandise.





SPECIFICATIONS

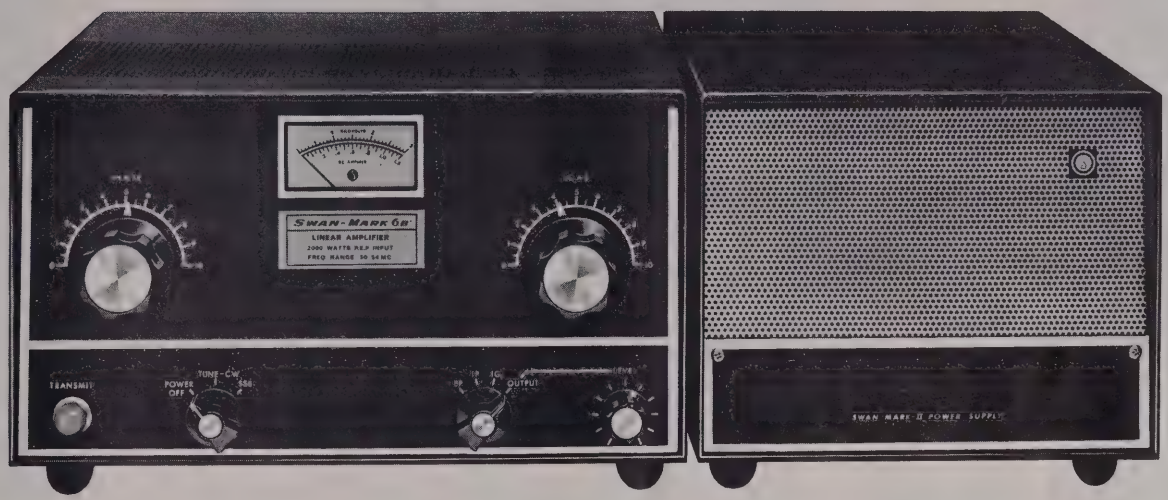
- ★ Two Eimac 3-500Z zero bias triodes in grounded grid circuit.
- ★ Conservative power ratings: 2000 watts P.E.P. input, 1000 watts CW-AM and RTTY input.
- ★ Full frequency coverage of amateur bands 10-80 meters plus MARS frequencies.
- ★ Wide range pi network in output tank circuit.
- ★ Drive requirements: 100 to 300 watts.
- ★ Includes changeover relay.
- ★ Ceramic insulation on all tuning capacitors and RF switches.
- ★ Planetary vernier drives on both plate and loading controls.
- ★ Low RPM, high volume fan operates almost silently.
- ★ Dimensions: 13 in. wide, 8 in. high, 14 in. deep.
- ★ Weight: 20 lbs.

POWER SUPPLY

- ★ Input voltage may be either 117 or 230 volts AC, 50-60 cycles. (230 VAC operation recommended)
- ★ Silicon rectifiers deliver 2500 volts DC in excess of 1.2 amperes.
- ★ Computer grade electrolytic filter capacitors. 40 mfd. net capacity.
- ★ Self contained fan for cool, continuous operation
- ★ 9 in. wide, 8 in. high, 14 in. deep.
- ★ Weight: 35 lbs.

SWAN MARK 6B

2000 WATT P.E.P. LINEAR AMPLIFIER FOR 6 METERS



SPECIFICATIONS:

Power Rating:
2000 Watts PEP Input in Single Sideband Mode.
1000 Watts DC input on CW AM or RTTY.

FREQUENCY RANGE: 50-54-mc
Uses two Eimac 3-400Z Grounded Grid Triodes.

Drive Requirement:
100 Watts for maximum legal input.

Meter Selector:
Reads Plate Voltage, Plate Current, Grid Current, and Relative Output.

Includes Transmit-Receive Relay Control for simple operation with a Transceiver.

Wide range Pi Output Circuit matches 52 or 75 ohm coax cable or variety of other load impedances.

Dimensions:
13" wide x 7" high x 12" deep.

Weight:
20 lbs.

POWER SUPPLY

Matching unit may be operated next to Amplifier as illustrated, or with its 4-1/2 foot connecting cable, may be placed on the floor.

Computer grade electrolytic capacitors, 40 mfd. filtering at 2500 VDC.

Silicon Rectifiers.
AC input: 117 or 230 volts, 50-60 cycles.
Includes quiet running fan for cool operation of all components.

Dimensions:
9" wide x 8" high x 14" deep.

Weight:
35 lbs.

SAVE $50
on MARK 6B Linear
(See BONUS D on Page 2)

Amateur Net, MARK 6B	**$395**
Matching Power Supply	**$265**
	$660

AMATEUR ELECTRONIC SUPPLY
4828 W. Fond du Lac Ave.; Milwaukee, Wis. 53216
Phone (414) 442-4200
STORE HOURS: Mon & Fri - 9 am to 9 pm; Tues, Wed & Thurs - 9 am to 5:30 pm; Sat - 9 am to 3 pm

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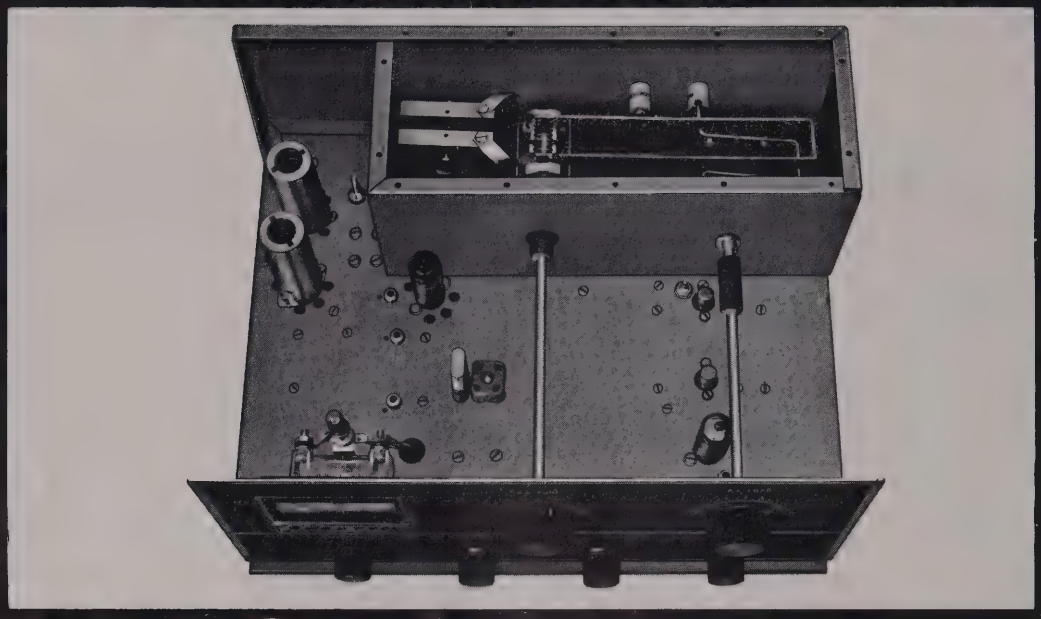
2 METER SINGLE SIDEBAND

144-148 mc 240 WATTS P.E.P. INPUT



THE NEW SWAN TV-2B TRANSVERTER

A receiving and transmitting converter for the 2 meter band, designed to operate with Swan Transceivers, models 250, 350, 350-C, 400, 500, and 500C.

SPECIFICATIONS:

14 mc intermediate frequency is standard. Thus, when operating the Transceiver from 14 to 14.5 mc, the Transverter functions from 144 to 144.5 mc. Additional crystals may be purchased and switched in for other portions of the 2 meter band, such as 144.5-145, and 145 to 145.5 mc. Three crystal positions are available.

Alternately, the TV-2B Transverter may be ordered for an I.F. in the 21, 28, or 50 mc bands, if desired. Of course, for use with a Swan 250 six meter transceiver, the Transverter must be ordered for 50 mc. Otherwise, the standard 14 mc I.F. is recommended since bandspread and frequency readout will then be optimum. The Transverter can easily be adjusted in the field for a different I.F. range, if required.

A 5894 B Power Amplifier provides a PEP input rating of 240 watts with voice modulation. CW input rating is 180 watts, and AM input is 75 watts.

Receiver noise figure is better than 3 db, provided by a pair of 6CW4 nuvistors in cascode.

Only a Swan Transceiver and Swan AC power supply, Model 117-XC, are required. The power supply plugs into the Transverter, and the Transverter in turn plugs into the Transceiver. Internal connections automatically reduce the power input to the Transceiver to the required level.

Tube complement: 5894B Pwr. Amp., 5763 Driver, 12BY7 Transmit Mixer, 2N706 crystal osc., 6EW6 Injection Amp., 6CW4 1st rec. amp., 6CW4 2nd rec. amp. in cascode, 6HA5 rec. mixer.

The TV-2B features a front panel switch which controls all of the associated circuits to permit selecting either transverter or transceiver operation. The TV-2B can be permanently installed with its transceiver-driver, since no change of the inter-cabling connections is required.

The Swan TV-2B may also be operated with other transceivers when proper interconnections and voltages are provided. A separate Swan 117-XC power supply will most likely be required.

Dimensions: 13 in. wide, 5½ in. high, by 11 in. deep. Weight: 13 lbs.

$350

MODEL 250 ..... $325
MODEL 350C 420
MODEL 500C 520

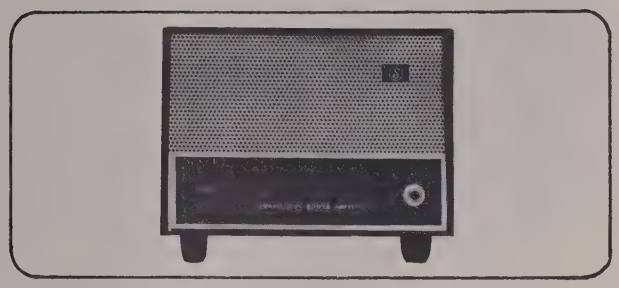
MODEL 117-XC
AC POWER SUPPLY .. $105

MODEL TV-2B
144 mc TRANSVERTER

SWAN
ELECTRONICS
A Subsidiary of Cubic Corporation

SWAN UNIVERSAL POWER SUPPLIES

Models for 12 volts D.C., 117 volts and 230 volts A.C., 50-60 cycles.
For use with all Swan Transceivers.



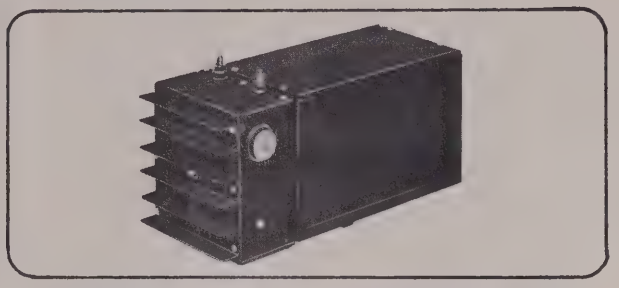
COMPLETE A.C. POWER SUPPLY

MODEL 117-XC

Complete A.C. supply for 117 volts, 50-60 cycles, in a matching cabinet with speaker, phone jack, and indicator light. Includes power cable with plug for transceiver, and A.C. line cord. Ready to plug in and operate. 8 inches wide, 5¼ inches high, 11 inches deep. Weight: 21 pounds..... **$105**

MODEL 230-XC

Same as above, but works on either 230 or 117 volts A.C. input..... **$115**



COMPLETE 12 VOLT D.C. POWER SUPPLY

MODEL 14-117

Complete D.C. supply for 12 volt mobile or portable operation. Includes cables, plugs, and fuses. Will also operate from 117 volt A.C. line by detaching the D.C. module, but does not include A.C. line cord. 5 inches x 5 inches x 12¼ inches.
Weight: 16½ pounds..... **$130**

MODEL 14-230

Same as above, except that 230-X basic supply is used..... **$140**

BASIC A.C. POWER SUPPLY

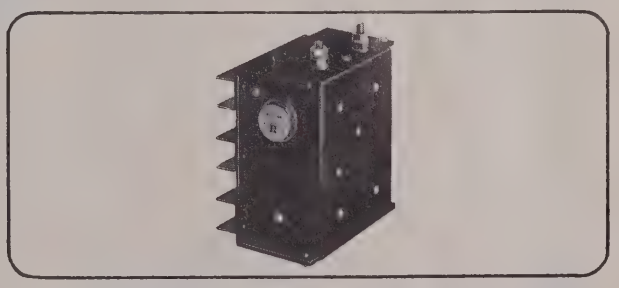
MODEL 117-X

A plain black box, does not include matching cabinet, speaker, or cables. 5 inches x 5 inches x 8¾ inches.
Weight: 14 pounds..... **$65**

MODEL 230-X

Same as above, but works on either 230 or 117 volts A.C. input..... **$75**

Pre wired A.C. line cord for 117 volts..... **$8**
Pre-wired A.C. line cord for 230 volts..... **$8**
8' pwr. cable & plug for transceiver, not wired **$6**



D.C. CONVERTER FOR 12 VOLT OPERATION

MODEL 14C

Converts 117-X or 230-X to 12 volt D.C. input, negative ground. Includes cable, plugs, fuses, and mounting hardware. 5 inches x 5 inches x 3½ inches.
Weight: 2½ pounds..... **$65**

MODEL 14CP

Same as above, but for positive ground.... **$75**

SWAN
ELECTRONICS *A Subsidiary of Cubic Corporation*

SWAN

EXTERNAL FREQUENCY CONTROLS

MODEL 508
EXTERNAL VFO

The Model 508 Frequency Control Unit is designed to serve as an external VFO to be used with the Swan 500C Transceiver. It may also be used with the Model 350C when the accessory socket is installed on back of the transceiver as described in the 350C technical manual.

The 508 plugs directly into the back of the transceiver after the jumper plug has been removed from the Swan 500C.

$145

MODEL 510 X
MARS OSCILLATOR

Ten Crystal controlled channels with vernier frequency control plugs directly into Model 500C and may also be used with 350C and other Swan Transceivers.

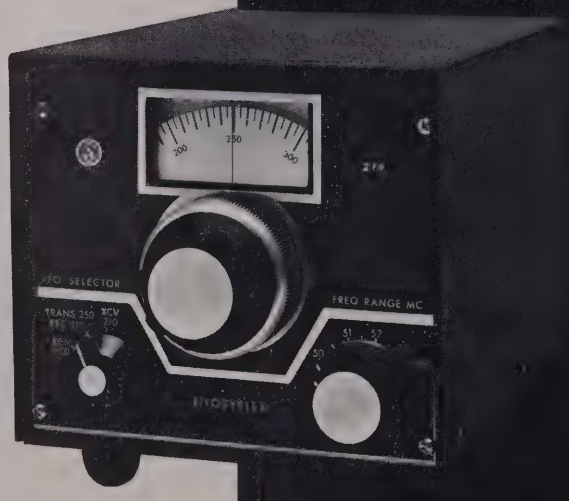
(less crystals) **$55**

MODEL 210
FREQUENCY CONTROL UNIT

Model 210 Frequency Control Unit is designed for full coverage of the 50-54 mc band when used with the model 250 transceiver. The unit matches the 250 in height, depth, and styling. Delay switching is built in, and a selector knob on the front panel provides for selection of frequency control.

An adaptor socket must be installed on back of the 250 transceiver to accommodate the 210. This adaptor socket and installation kit is included with the 210.

$120



SWAN
ELECTRONICS
A Subsidiary of Cubic Corporation

NO MORE COIL CHANGING WITH THE NEW IMPROVED

SWANTENNA

5 BANDS - 500 WATTS POWER RATING

The only remote controlled band switching mobile antenna on the market.

Now with the new improved Swantenna mobile antenna, you achieve the ultimate in mobile operation: a high efficiency antenna system plus band switching while driving.

This new Swantenna has two major improvements: The use of GE Lexan in the center coil support that makes it virtually unbreakable, and the new lightweight stainless steel whip.

Greater radiation efficiency and field strength are provided through the high Q of the loading coil and the use of gold plated switching contacts.

SPECIFICATIONS:

- Covers 75 meters in 5 positions, plus stops for 40, 20, 15 and 10 meters.
- 500 watt power rating.
- High efficiency loading coil.
- Stainless steel whip with KWIK-ON connector.
- Chrome plated base section.
- Bumper or deck mounting.
- Fits any standard 3/8-24 mount.

MODEL 55 $95
Remote control band selection. Same as Model 45, but with remote control switching from driver's seat. Control unit includes meter for tuning to maximum output. 12 volt motor drive.

MODEL 45 $65
Manual band selection

DELUXE **BUMPER MOUNT**

The most important development in mobile antenna mounts in years. No chain to break, no clip to stretch. Made of highly polished cast aluminum. Complete instructions illustrate how to fit this deluxe mount to the exact contour of your bumper providing the strongest, best looking mount for your Swantenna. **$24.95**

THE ORIGINAL **KWIK-ON** ANTENNA CONNECTOR.

Disconnect antenna from bumper mount in seconds. Made of stainless steel. Noise free. **$3.25**

SWAN HYBRID PHONE PATCH

The Model FP-1 Phone Patch is designed to connect a radio receiver and transmitter, or transceiver to a telephone so that the party on the other end of the telephone line can listen and talk over the radio circuit. The Unit is designed specifically to connect easily and quickly to any of the Swan Transceivers, although it can also be used with other transceivers, or with separate receivers and transmitters. **$48**

A PICTURE TOUR OF AMATEUR ELECTRONIC SUPPLY

AMATEUR ELECTRONIC SUPPLY MAIN STORE AND WAREHOUSE IN MILWAUKEE, WISCONSIN

A portion of the Milwaukee Store Counter Area

Steve Potyandy, W9EAN, Store Manager, with Mfg's. Rep. Jack West, W9NHF

SALESMEN: Robert Graushar, WA9TID - Dick Grothe, K9IFF - Doug Alt, WA9SDC - Paul Szczerbinski, W9KHO

A portion of our large selection of Top Quality RECONDITIOND EQUIPMENT

Miles Cundy, K9HMQ – Reconditioning/Service Manager

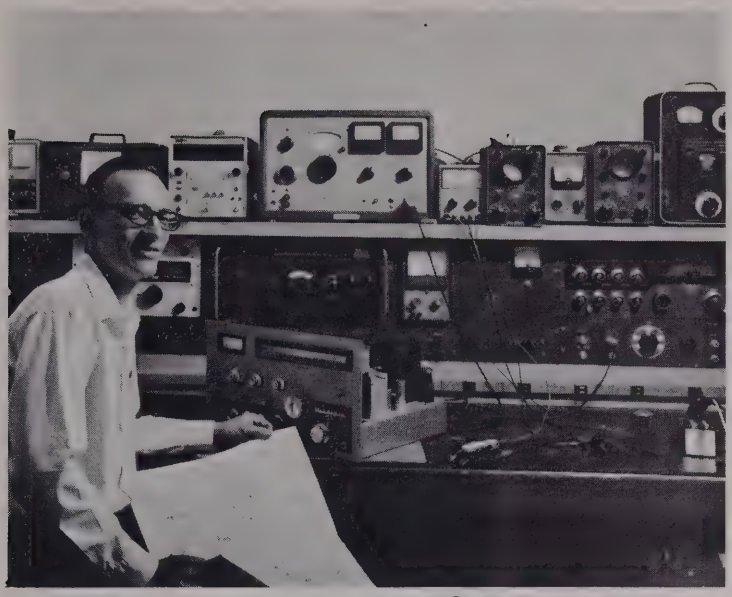
Gil Potyandy, W9IYQ – Reconditioning/Service Department

Ray Grenier, K9KHW - Manager, Mail Order Sales

Large Stocks mean FAST DELIVERY

New Equipment Receiving Department

Terry and Ray, checking Rohn tower stock



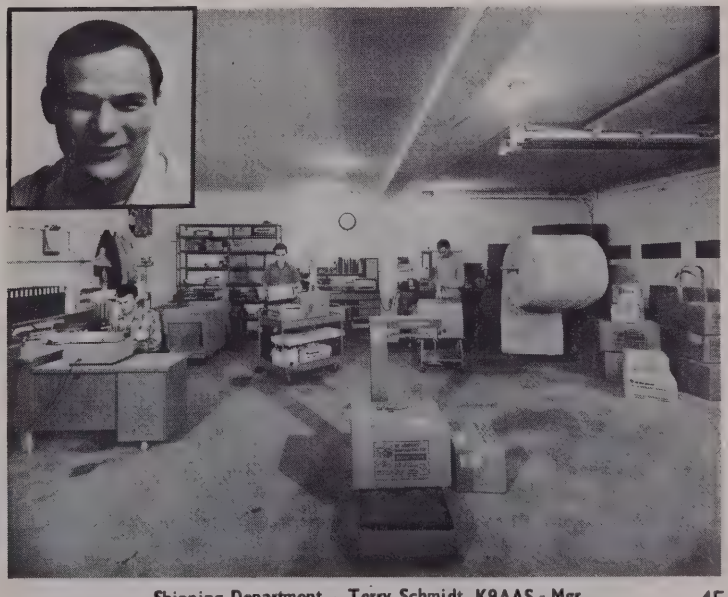
Carl Schultz, K9GOS – Reconditioning/Service Department

Jim Parkinson, W9JEF – Reconditioning/Service Department

Specially constructed dust-collecting machine, used in Reconditioning

Clean-up and Paint Room, used in Reconditioning

Trade-In Receiving Department

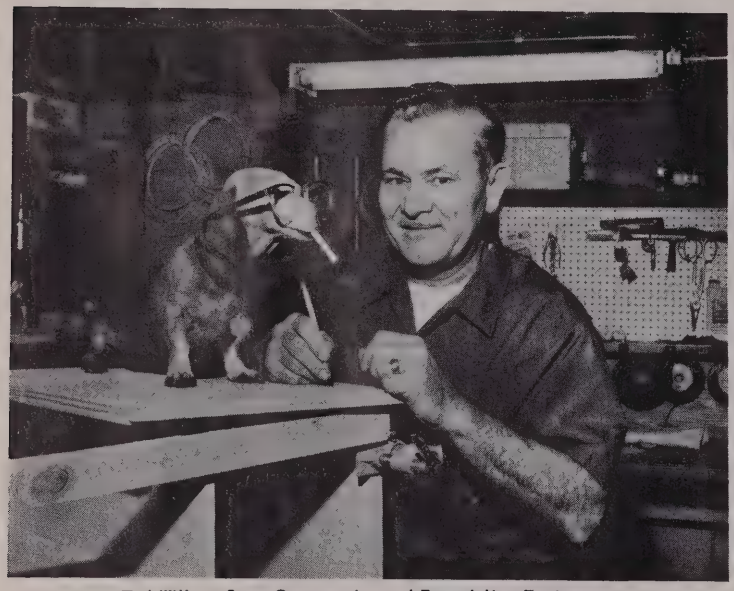


Shipping Department – Terry Schmidt, K9AAS - Mgr.

A PICTURE TOUR OF AMATEUR ELECTRONIC SUPPLY

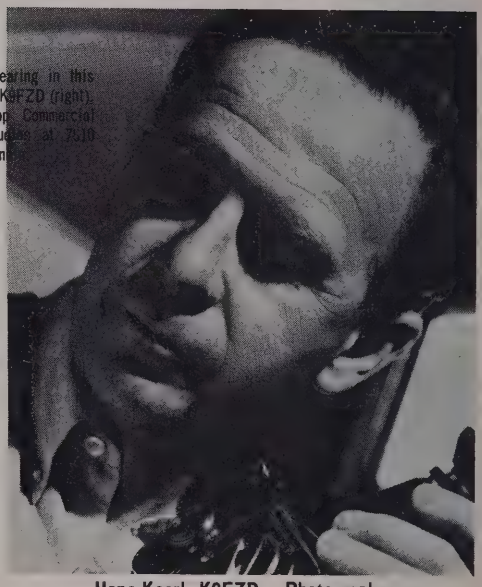
Elin Haworth, K9YHE – Office Manager

Mail Order Processing Department



Ted Willett, Sr. – Construction and Remodeling Engineer

Most of the A. E. S. pictures appearing in this Catalog were taken by Hans Keerl, K9FZD (right), who is one of the nation's top Commercial Photographers. Hans has his studios at 7510 Harwood Avenue, Wauwatosa, Wisconsin.



Hans Keerl, K9FZD – Photographer

AMATEUR ELECTRONIC SUPPLY-owned Print Shop, located at 4913 West Fond du Lac Ave. —— Ted Willett, W9NHE, Print Shop Manager

All about our REVOLVING CHARGE PLAN

No more bulky coupon books! Once a month you receive an itemized statement showing your account transactions during that month and the minimum monthly payment required. Payments and purchases made near the billing date will be shown on your next statement.

A service charge of 1½% per month (or a minimum charge of $1.00) is added to your balance monthly. If you decide to protect your investment by taking the life and property insurance that is available, separate insurance charges are then included in your balance. On outstanding balances in excess of $1,000.00, the service charge is reduced to 1% of that portion over $1,000.

NOTE: The 1½% monthly service charge is approximately equal to an annual percentage rate of 18%. The 1% service charge on the amount over $1,000 is approximately equal to an annual percentage rate of 12%.

You control the total service charge you pay on your Revolving Charge Purchase. The total service charge depends upon how fast you pay your account in full. Because service charges are added to your account monthly rather than determined in advance, there is never any complicated refund of unused service charges...You just remit the balance shown on your billing, if you wish to pay your account in full.

Amateur Electronic Supply has established this plan for your convenience. All accounting and billing details are handled and provided for us by the General Electric Credit Corporation. For this reason, it is important that you mail your payments to the P. O. Box shown on your monthly statement.

To use our Revolving Charge Plan, an applicant must be at least 21 years of age, be a US citizen, have good credit ratings and regular full-time employment, etc. All Revolving Charge Plan Orders are subject to credit approval.

Normally, only $5.00 down is required on orders for new or reconditioned equipment, unless otherwise specified. US citizens living temporarily outside the USA (such as servicemen at APO addresses, etc.) can usually secure approval by making a more substantial down payment of at least 20%. A trade-in cannot act as a down payment. No orders can be processed without that $5.00 down to "Seal the Deal".

IMPORTANT! Shipping charges cannot be financed. If your Revolving Charge Plan Order is to be shipped via Parcel Post, Air Mail, or United Parcel Service (UPS), in addition to the $5.00 down payment required, BE SURE to include enough for postage – excess amounts will be promptly refunded. Show the amount you have allowed for postage on line 7 of the order blank. Do not remit for REA, air express or truck shipping charges – they will be collected upon delivery.

The minimum balance that can be financed (after down payment and trade-in) on our Revolving Charge Plan is $100.00. ADD-ON's of $50.00 or more can be considered after you have completed at least four monthly payments. Again, the $5.00 down payment must be enclosed with all add-on orders, to "Seal the Deal".

A one-time $2.00 "Official Fees" charge is made on your First contract when you open a Revolving Charge Account. The purpose of this is to help defray some of the expenses of: checking your credit, setting up your account, and the necessary filing fees. Once your account is open, there are no "Official Fees" charges on Add-On orders or Re-Opened accounts that have not been closed for more than six months.

LOOK at your low Monthly Payment AFTER JUST $5.00 DOWN

REVOLVING CHARGE PAYMENT CALCULATOR

Minimum monthly payment is based on original principal balance to be financed or new balance in the case of add-ons.

Balance	Minimum Monthly Payment
Up to $300.00	$10
$300.01 to 340.00	11
340.01 to 370.00	12
370.01 to 400.00	13
400.01 to 430.00	14
430.01 to 460.00	15
460.01 to 490.00	16
490.01 to 520.00	17
520.01 to 550.00	18
550.01 to 580.00	19
580.01 to 610.00	20
610.01 to 640.00	21
640.01 to 670.00	22
670.01 to 700.00	23
700.01 to 730.00	24
730.01 to 760.00	25
760.01 to 790.00	26
790.01 to 850.00	28
850.01 to 910.00	30
910.01 to 970.00	32
970.01 to 1030.00	34
1030.01 to 1060.00	35
1060.01 to 1220.00	40
1220.01 to 1400.00	45
1400.01 to 1550.00	50
1550.01 to 1700.00	55
1700.01 to 1850.00	60
1850.01 to 2000.00	65
2000.01 to 2150.00	70
2150.01 to 2300.00	75
2300.01 to 2450.00	80
2450.01 to 2800.00	90
2800.01 to 3100.00	100
3100.01 to 4000.00	125

Minimum initial REVOLVING CHARGE Order—$100

Minimum Monthly Payment—$10

Minimum ADD-ON Order—$50

AMATEUR ELECTRONIC SUPPLY
4828 W. Fond du Lac Ave. Milwaukee, Wis. - 53216 Ph. (414) 442–4200
MILWAUKEE STORE HOURS: Mon & Fri - 9 am to 9 pm – Tues, Wed, Thurs - 9 am to 5:30 pm – Sat - 9 am to 3 pm.

CREDIT APPLICATION

nclose this Application with your FIRST Charge or Time Payment Order

e sure to fill out this form ACCURATELY and COMPLETELY

					BUYER'S DRIV. LIC. NO.	STATE			
ME — LAST	FIRST	INITIAL	AGE	☐ MRD. ☐ SEP. ☐ WID. ☐ DIV.	SPOUSE'S NAME & INITIAL (IF SINGLE, SO STATE)		NUMBER DEPENDENTS		1.
DRESS— NUMBER	STREET	APT. #	CITY	STATE ZIP CODE	HOW LONG YR. MO.	☐ HOME PHONE ☐ N/B			2.
☐ RENTING FURNISHED ☐ RENTING UNFURNISHED	☐ BUYING OR OWNS ☐ OTHER	LANDLORD OR MORTGAGE HOLDER AND ADDRESS				RENT OR PMT. $			3.
EV. ADDRESS (IF LESS THAN 5 YRS. AT PRESENT ADDRESS)				HOW LONG YR. MO.	IF PRES. & PREV. ADDRESS TOTAL LESS THAN 5 YEARS, SHOW NO. OF YEARS IN THIS AREA YRS.				4.
YER EMPLOYED BY		ADDRESS OR LOCATION			HOW LONG YR. MO.	SOCIAL SECURITY NO.			5.
PERIOR	DEPT. #	BADGE #	PHONE NO.	EXT.	OCCUPATION	PAYDAY	MONTHLY TAKE HOME PAY $		6.
OUSE EMPLOYED BY —			PHONE NO.	EXT.	OCCUPATION	HOW LONG YR. MO.	MONTHLY TAKE HOME PAY $		7.
YERS PREVIOUS EMPLOYER					OCCUPATION	HOW LONG YR. MO.	TOTAL MO. NET INCOME $		8.
- AUTO	MAKE	MODEL	☐ PAID FOR ☐ FINANCED		BANK OR SAV. & LOAN CO. AND ADDRESS			☐ CHECKING ☐ SAVINGS	9.
AUTO OR RNITURE IS NANCED, SHOW WHOM	AUTO	COMPANY 1.			ADDRESS OR LOCATION				10.
	FURN.	2.							11.

ST ADDITIONAL CREDIT REFERENCES OF BANKS. FINANCE COMPANIES. ETC. (OPEN OR CLOSED WITHIN THE LAST TWO YEARS) 12.

ITEM OR SECURITY	NAME OF CREDITOR OR COMPANY	ADDRESS OR LOCATION	OPEN	CLOSED	
	3.				13.
	4.				14.
	5.				15.
	6.				

	NAME	ADDRESS	RELATIONSHIP
LIST TWO RELATIVES AND ONE FRIEND NOT LIVING WITH BUYER.			

se the space below for additional information (if any)

I CERTIFY THAT ALL STATEMENTS IN THE CREDIT APPLICATION SET FORTH ABOVE ARE TRUE AND COMPLETE

x _____

APPLICANT'S SIGNATURE DATE

If you have a **HAM** or **C B CALL**, please show it in the space below:

SERVICEMEN !

Be sure that someplace on this form you have shown: Your Serial Number, Rank, Commanding Officer's Name, and Your Date of Separation, etc.

AMATEUR ELECTRONIC SUPPLY 4828 W. FOND DU LAC AVENUE MILWAUKEE, WIS. 53216

FROM:

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP CODE _____

HAM OR CB
CALL (if any) _____

Postage
Will Be Paid
by
Addressee

Postage
Will Be Paid
by
Addressee

BUSINESS REPLY MAIL

First Class Permit No. 10121 Milwaukee, Wisconsin

POSTAGE WILL BE PAID BY:

AMATEUR ELECTRONIC SUPPLY

4828 West Fond du Lac Ave.

Milwaukee, Wisconsin 53216

ORDER BLANK

AMATEUR ELECTRONIC SUPPLY

4828 W. FOND DU LAC AVENUE
MILWAUKEE, WIS. 53216
PHONE (414) 442-4200

IMPORTANT! — Persons having a TRADE-IN must also complete the reverse side of this Order Blank.

SHIP THIS ORDER VIA: ☐ PARCEL POST ☐ AIR MAIL ☐ UNITED PARCEL ☐ REA ☐ AIR EXPRESS ☐ TRUCK **OTHER:** _____

IMPORTANT – If this order is to be shipped via Parcel Post, Air Mail, or United Parcel Service, be sure to enclose enough for Postage – excess amounts will be promptly refunded. DO NOT remit for REA, Air Express, or Truck shipping charges – they will be collected upon delivery. Before specifying United Parcel, please check the UPS map (on reverse side of this Order Blank) for the states served from Milwaukee. Amateur Electronic Supply reserves the right to ship best way if, in our opinion, the method of shipment indicated is unsatisfactory.

Please type or print clearly:

SOLD TO: **DATE:** _____

Name _____ **Call** _____

Address _____

City & State _____ **Zip Code** _____

You may telephone me at: (Be sure to show area codes)

Home # _____ **Hours:** _____

Work # _____ **Hours:** _____

SHIP TO: (if other than at left)

_____

_____

_____

IF YOU HAVE MOVED since your last order, please show your old address below:

_____

_____

QTY.	DO NOT USE	MANUFACTURER – PART OR MODEL # – DESCRIPTION	PRICE EACH	TOTAL

Final Balance (line 10) to be paid by:

☐ C. O. D. (20% deposit required)
☐ REVOLVING CHARGE PLAN ($100.00 minimum)
☐ Add this Balance to my present Revolving Charge Plan. My Account Number is: _____ ($50.00 minimum)

Persons using our REVOLVING CHARGE PLAN must check one of the following:

☐ I have established credit with you. My credit card number is _____.
☐ I have already sent you my Credit Application, on or about _____. (date)
☐ Please find enclosed my Credit Application.

If your order is to be shipped Parcel Post, Air Mail, or United Parcel, be sure to enclose enough for Postage and Insurance – excess amounts will be promptly refunded. If you are using our Revolving Charge Plan, be sure to enclose at least $5.00 down, in addition to postage. Enclose payment-in-full whenever possible, as Revolving Charge orders take slightly longer to process. COD orders should be avoided because of the extra cost and delay in shipping.

LINE 1 – **Total amount of order**.....	$
LINE 2 – Subtract here Bonus Credits, Coupons, Discounts, or Special Allowances, etc. (if any).....	–
LINE 3 – Subtract Trade-In Allowance (if any)..... Enclose our original quotation, and list the items you are trading below: _____ _____ **IMPORTANT! Persons having a Trade-In must also complete the reverse side of this order blank!**	–
LINE 4 – **Balance**.....	$
LINE 5 – Sales Tax (Wisconsin Residents only)	+
LINE 6 – Due AES from previous order (if any).....	+
LINE 7 – Estimated Postage or UPS Charges & Ins...	+
LINE 8 – **Total Amount Due**....	$
LINE 9 – **Amount Enclosed** (or Down Payment)...	–
LINE 10 – **Final Balance Due** (if any)....	$

Sign here for the STAY ON THE AIR PLAN

I have made the PROPER PAYMENT or DOWN PAYMENT, and I will ship my trade-in to you, well-packed and insured for full value, WITHIN TEN DAYS after I receive your shipment. I understand that, in order to receive full trade-in allowance as quoted, my trade-in must be in GOOD electrical and physical condition, free from modifications, abnormal wear, rust and corrosion, and complete with instruction manuals and original accessories such as power cords, brackets, etc. that originally came with the set new. If my equipment does not meet with your specifications, I agree to pay the cost of labor and parts required to put it in satisfactory condition. I also agree to pay $3.00 for each instruction manual I fail to ship WITH my trade-in. Before shipping my trade-in, I will clean it up and check the equipment for proper operation on all bands and in all modes for which it was designed, etc. If, in doing this, I find some defect, I understand that if I make a note of them and enclose it with the trade-in, it will help to expedite the final determination of trade-in allowance. I further agree that in the event that my trade-in is not shipped to you within TEN DAYS after receiving your shipment, the trade-in allowance shall be DECREASED by TEN PERCENT for EACH TEN DAYS I fail to ship same.

Signed_____ **Date**_____

Persons having a TRADE-IN must COMPLETE the above STAY ON THE AIR PLAN or CHECK the following BEFORE their order can be processed

☐ I am not using your STAY ON THE AIR PLAN, as described above. I want you to hold my order until you receive my trade-in, which I am shipping to you via:

_____ on _____ (date).

SHIPPING YOUR TRADE-IN

Normally, Trade-In transactions with firms other than Amateur Electronic Supply are entirely f.o.b. their store, which, of course, means that the customer pays ALL shipping charges. When Trading with Amateur Electronic Supply, if you live in the USA (excluding Alaska and Hawaii) and can ship your Trade-In to us via REA within ten days after you receive our shipment, you may send it to us COLLECT for shipping charges. When shipping your Trade-In to us, specify ICC #33-G to the REA agent, and insure it for the full amount of the trade-in allowance. It is your responsibility to make sure that your Trade-In equipment is well-packed in a sturdy enough carton, etc. – to prevent damage in shipment. Please make sure that there is plenty of packing material around the equipment and that there are plenty of "Fragile" and "Handle With Care" stickers on the outside of the carton. If you don't have any, usually they can be gotten free from the express office. Also, please be sure that the REA agent is satisfied with the way the equipment is packed. If your Trade-In is received in a damaged condition, Amateur Electronic Supply will file a claim, but will assume no responsibility if the transportation company refuses to pay a claim due to improper packing or lack of Insurance, etc.

As stated in the "Stay-on-the-Air Plan" and in the paragraph left, your Trade-In should be shipped to us within ten days after you receive our shipment. The only exception to this rule is that if you should have problems with new equipment and find it necessary to return it to the factory for Warranty repairs. If you notify us of this situation, you may keep your Trade-In (if needed) until you have your new equipment returned to you in good operating condition, etc.

If you live in an area not served by REA, in Alaska or Hawaii, or outside the USA, you are to ship your Trade-In to us via the best method, insured and prepaid.

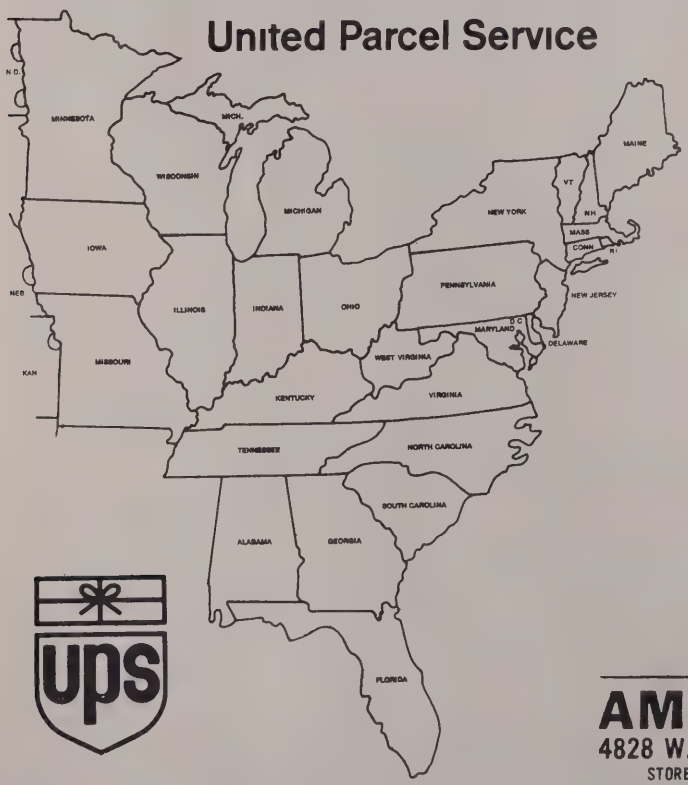
When shipping your Trade-In to us via REA, **BE SURE** to ask the REA agent for **ICC #33-G**, which is a special Commodity Rate available in most states.

SHIPPING INFORMATION

All outgoing orders are f.o.b. Amateur Electronic Supply, unless otherwise specified. In a case where Amateur Electronic Supply would elect to make a split-shipment of an order, the customer would be required to pay shipping charges ONLY on the FIRST shipment. Any further shipments on that same order will be made at the expense of Amateur Electronic Supply.

When a shipment arrives from Amateur Electronic Supply, please Inspect and Count the cartons carefully before signing for the merchandise. If any of the cartons appear to be damaged, please make a notation on the delivering carrier's receipt. If upon unpacking your new equipment you find that the equipment is damaged, be sure to keep all packing material (cartons, etc.) and notify the delivering carrier immediately to make the proper claim. In case of damage - you must make the claim at your end – A. E. S. cannot do it for you.

United Parcel Service



More and more customers are beginning to request United Parcel Service (UPS). The area AMATEUR ELECTRONIC SUPPLY can serve from Milwaukee is shown to the left. The rates are similar to Parcel Post. Packages may not exceed 50 pounds each or 108" in Length AND Girth. If you select this method of shipment, someone should be at the shipping address to take delivery – after several delivery attempts, UPS returns the parcels to the shipper.

If you specify United Parcel Service (referred to as UPS), Parcel Post or Air Mail, – be sure to enclose enough for shipping charges and insurance. Send plenty! Excess amounts will be promptly refunded. If you are using our Revolving Charge Plan, be sure to enclose at least $5.00 down in addition to postage. (Shipping charges cannot be financed.)

DO NOT remit for REA, Air Express or Truck shipping charges – they will be collected upon delivery.

AMATEUR ELECTRONIC SUPPLY
4828 W. Fond du Lac Ave. Milwaukee, Wis. - 53216 —— Ph. (414) 442–4200
STORE HOURS: Mon & Fri - 9 am to 9 pm – Tues, Wed, Thurs - 9 am to 5:30 pm – Sat - 9 am to 3 pm.

SAVE $50 *on the new . . .*

See BONUS D
on Page 2

GALAXY R-530

Communications Receiver

FEATURE PACKED

SOLID STATE RECEIVER

- **MAIN TUNING DIAL** — Visual resolution of frequency is accurate to 1KHz. A unique fiducial provides calibration and tuning dial correction each 50 KHz. . . . throughout entire receiver frequency range.
- **NOISE BLANKER** — A newly designed circuit. . .effective in reduction of unwanted background noise and interference. Especially useful when receiving SSB and CW signals.
- **RF ATTENUATOR** — Variable attenuation at antenna terminal, improves front-end overload characteristics. Permits positive control of cross-modulation especially during monitoring use.
- **VARIABLE BFO** — Operative in USB, LSB, CW and RTTY modes of reception. Provides proper adjustment of BFO for line and RTTY operation.
- **PRE-SELECTOR** — Permeability tuned insures optimum performance across entire frequency spectrum. Reduces cross-modulation and insures minimum gain variation over entire spectrum.
- **PTO** — The Permeability-Tuned-Oscillator provides outstanding linearity, stability and frequency reset capability.
- **CRYSTAL LATTICE FILTER** — The standard 2.1 Khz filter gives a near-rectangular IF bandpass, insuring optimum selectivity. Optional 0.5 and 6.0 KHz filters are available.
- **PHASE-LOCK OSCILLATOR** — Frequency determination in the R-530 is accomplished with a Phase-Locked Frequency Oscillator. Eliminates the necessity of multiple crystals and bandswitch problems as well as insuring the optimum in stability.

SPECIFICATIONS

Receiver Type: RF Superheterodyne, dual conversion, solid state.

Frequency Range: 0.5 to 30 MHz *continuous*

Frequency Readout: 1 KHz over entire 500 KHz tuning range of PTO

Frequency Stability: From turn-on no more than 100 Hz. including 20% line voltage variation.

Calibration Accuracy: 1KHz with 50 KHz calibrator.

Blacklash: Less than 100 Hz.

Metering: RF calibrated 0 to 80 db above 1 microvolt, AF calibrated −6 to +4 dbm (600 ohm balanced line).

Inter-Modulation Distortion: 3rd order suppressed more than 50db.

Sensitivity: 0.1 microvolts for 6 db signal plus noise to noise ratio SSB; 0.05 microvolts for 6 db signal plus noise to noise ratio CW; 0.5 microvolts for 6 db signal plus noise to noise ratio AM.

Selectivity: 2.1 KHz crystal lattice filter, 1.8:1 shape factor, SSB. Optional filters for CW (0.5 KHz) RTTY 1.5 KHz and AM 6.0 KHz) are available and all are front panel selected.

RF Signal Attenuator: Variable line attenuator provides 0-20 db attenuation of signal befor reaching receiver front-end.

Harmonic/Spurious Response: All spurious and harmonic suppressed more than 50 db.

Noise Blanker: Adjustable for optimum performance on SSB and CW.

Audio Output Level: More than 1 watt with less than 10% distortion.

Audio Response: 250 to 3.0 KHz plus or minus 3 db.

Audio Output Provisions: Speaker (8 ohms) Line (600 ohms balanced) Headphone.

Calibrator: 50 KHz.

Power Requirements: 115/230 VAC, 50-60 Hz at 24 watts or 18 VDC maximum source drain 600 ma.

Front-end Overload: 0.1 volt for 10% distortion (On Signal).

Size: 6'' H x 17'' W x 14'' D Cabinet; Rack Panel 8¾'' H x 19'' W x 14'' D.

Weight: 25 lbs. (Shipping weight BCP 32 lbs.).

R-530. . .Receiver, less accessories. 695.00

NOTE: Specification subject to change without notice.

ACCESSORIES

RPA-530	Rack Panel Adapter. Standard 19'' Adapts the R-530 to Rack Panel Mount.	125.00
SPK-530	Speaker Console with cables.	40.00
FL-5305	500 Hz crystal lattice filter.	45.00
FL-53015	1.5 KHz crystal lattice filter.	45.00
FL-5306	6.0 KHz crystal lattice filter.	45.00

Other filters available on request.

See BONUS D on page 2

SAVE $50 on the NEW GALAXY

NEW 550 WATT SSB POWER!

New Features! Exciting New Beauty!

GT-550 TRANSCEIVER

5 BAND SSB

Mobile or Fixed Station

— AND....A COMPLETE LINE OF HANDSOME MATCHED ACCESSORIES!

Wattmeter/ Antenna Selector $69.00

GT-550 Transceiver $475.00

Speaker Console $25.00

"HOT," Husky, and Handsome!

You asked for it . . . now it's here! The new GALAXY GT-550 and a complete line of handsome matching accessories!

Your suggestions made it possible. We took your ideas—added some of our own and went to work. We built in new power, new conveniences—such as a 25 kHz calibrator option, and no frequency jump when you switch sidebands. Then we hired the best designers in the business to give GALAXY a distinctive "New Look"!

Our new GT-550 has all those great qualities of the famous Galaxy V's . . . and then some! It has new POWER . . . 550 watts SSB, making it the hottest transceiver made! A new single scale VFO Dial makes frequency interpolation child's play . . . the new skirted knobs make tuning and band-changing a split-second job . . . and, that slick, king-sized finger-tip tuning knob works like a dream!

P.S. Sounds unbelievable but it's an even HOTTER receiver than our previous Galaxy V's!

SPECIFICATIONS:

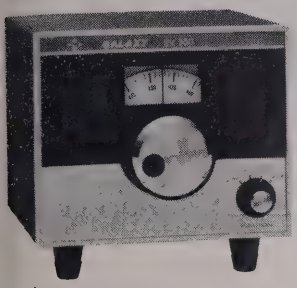
TRANSMITTER: 550 watts PEP, SSB, 360 watts CW. Manual keying for SSB/CW, or VOX operation with accessory installed. Also, break-in CW with accessory VOX installed. Built-in audio side-tone for CW monitoring through speaker or headphones. Selectible sideband without 2 kHz jump when changing sidebands. Shifted carrier CW to prevent "leap-frogging" with another transceiver. Stable, -45DB carrier suppression. Unwanted sideband suppressed over -55DB. Sharp, 2.1 kHz filter with better than 1.8:1 shape factor. ALC circuitry automatically reduces gain level to prevent "flat-topping". High impedance microphone circuit (use -50/60 DB microphones) with PTT control circuit. Audio response @ -6 DB points approximately 300 and 2400 Hz. Adjustable Pi-Network antenna matching for resonant 40/100 Ohm loads.

RECEIVING: Nominal 50 Ohm input with relay control for antenna switching. Preselection coupled to exciter tuning. Sensitivity better than ½ uv for 10 DB S+N/N ratio. Selectivity 2.1 kHz with same, outstanding 1.8:1 shape factor for SSB/CW, or 300 Hz sharp selectivity with optional, plug-in CW Filter. Full AGC on receive modes with fast attack and slow release characteristic. Nominal 1 watt audio output with -6 DB points @ 300/2400 Hz. External 8 Ohm speaker required.

FREQUENCY COVERAGE: Crystals supplied for 3.5-4.0, 7.0-7.5, 14.0-14.5, 21.0-21.5, 28.0-29.0 mHz. Optional crystals may be installed for other 10 meter coverage. A solid-stage VFO operates, without switching, in the range of 5.0-5.5 mHz at all times. Double regulation and temperature compensation makes this VFO extremely stable. An illuminated dial with over 12 inches of linear bandspread. Primary dial calibration marks of 5 kHz. Smooth, vernier dial provides 72:1 vernier tuning for ease of operation.

BEAUTIFULLY MATCHED..."Made For Each Other"

THE NEW GALAXY GT 550 ACCESSORIES



REMOTE VFO RV550

$75.00

A solid-state VFO like that in the transceiver, complete with simple plug-in cables. Function switch selects the remote unit to control Receive-Transceive-Transmit frequency independently. Gives about the same flexibility as a separate transmitter and receiver with the GT-550. Approx. 7x7¼x6½" (HWD) & 4 lbs.

R. F. CONSOLE RF550

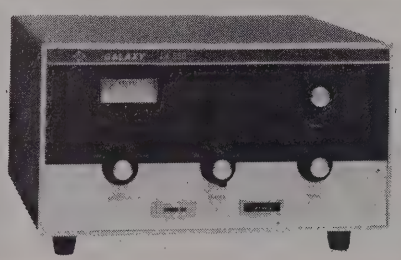
$69.00

Contains a precision wattmeter with a high degree of accuracy in the range of 3.5/30.0 mHz. Calibrated scales are 400 and 3000 watts full scale, switch selected for forward or reflected power. Also contains a switch to select 5 antennas plus a dummy load, and all unused connections are grounded. SO239 coax-connectors. Approx. 7x7¼x6½" (HWD) & 5½ lbs.

SPEAKER CONSOLE SC550

$25.00

A matching speaker with headphone jack for the transceiver, complete with cable. AC400 power supply will mount inside the console. Approx. 6x10x9½" (HWD) and 6 lbs.



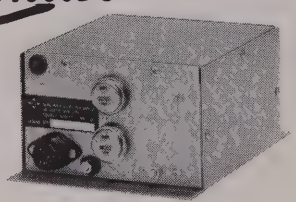
LINEAR AMPLIFIER LA550

$495.00

The new LA550 Linear Amplifier provides 2,000 watts PEP input on SSB, 1,000 watts DC input on CW/RTTY. It is bandswitching on amateur frequencies 80 through 10 meters, with some adjacent MARS-SPECIAL frequencies. The linear can be driven by any exciter with 100/200 watts output. Though the unit uses ten 6LB6 tubes in parallel (matched set), it has the lowest known replacement cost of any full power unit.

MOBILE SUPPLY G1000DC

$125.00



A solid-state supply to provide full power SSB operation and tune power required. For 12VDC, negative ground car systems. Approx. 6x8x3¾" and 7 lbs. Complete with primary and secondary cables.

PHONE PATCH PR550

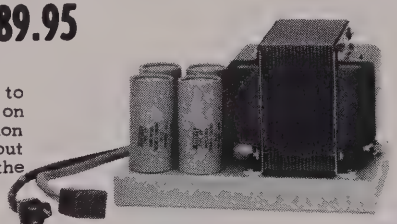
$49.00

A Deluxe Patch (hybrid) and recorder control circuitry. A panel mic. jack accepts a S260 (PL68) plug and a selector switch (lock or momentary) controls the unit PTT line. A function switch selects the desired routing of audio to an optional tape recorder to record or playback to the equipment or phone line. Panel gain controls for receive-transmit audio levels. Black case & satin silver panel. 2½x7½x6½" and 2 lbs.

AC SUPPY / AC400

$89.95

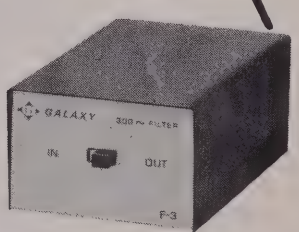
A heavy duty solid-state supply to operate the GT-550 at full power, on SSB or CW, and with switch selection of 115/230 VAC, 50/60 Hz input voltages. Wired cable/plug for the GT-550. Approx. 20 lbs.

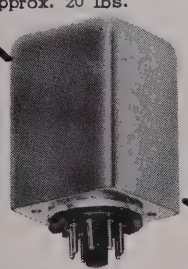


CW FILTER F3

$29.95

A plug-in unit for the GT-550 to obtain extra-sharp CW reception of 300 Hz. Complete with cables. Panel in-out switch. Approx. 2x3-3/8x6" (HWD) and 2 lbs.

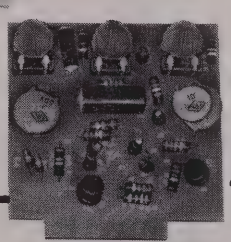




CALIBRATOR CAL-25

$25.00

Just the ticket for the new sub-band divisions, this solid-state unit plugs-in (internally) and is operated from the panel function switch. Sh. wt. 10 oz.



VOX ACCESSORY VOX35C

$29.95

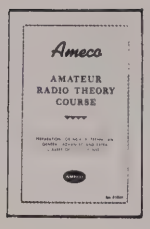
Completely solid-state, and instant plug-in (internally) on the GT-550 chassis. Three controls allow full-range settings for "vox gain", "anti-vox gain" and "time delay". Controls may be adjusted from outside cabinet. Sh. wt. 8 oz.

NEW

GALAXY FM-210 is a 2 Meter FM transceiver, available approximately Nov. 1, 1969. Five watts of power on 12vdc....10 watts with optional AC/DC supply. Three independent receive channels and 3 independent transmit channels. 12vdc transceiver (less microphone) is $199.95. Optional AC/DC supply is $39.95.

AMATEUR RADIO AMECO CODE COURSES

RADIO AMATEUR THEORY COURSE
by Martin Schwartz



A complete, simplified home study theory course in radio covering the requirements for the Novice, Technician and General Classes of Radio Amateur Operator licenses. Contains 14 lessons, 3 study guides and over 400 FCC-type multiple-choice questions, similar in content and format to the actual FCC test - all under one cover. The course starts with basic electricity and ends with amateur transmitters and receivers. The study guide acts as your instructor, giving hints on how to study, what material is more important, etc.

Cat. No. 102-01. 256 pages $3.95

RADIO AMATEUR QUESTION AND ANSWER LICENSE GUIDE
by Martin Schwartz

This book is a practice guide for those preparing for the Novice, Technician and General Classes of Radio Amateur Operator licenses. It contains easy-to-understand answers for each FCC study question, plus two typical FCC-type exams, similar in content and format to the actual FCC exam. The questions are grouped according to subject matter, making study easier.

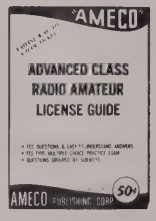
Cat. No. 5-01. 48 pages . . . . . 50¢

MASTERING THE MORSE CODE
by Martin Schwartz

This book teaches the beginner how to learn the International Morse Code. Some of the topics covered are: Requirements for obtaining operator licenses, rules for practicing the Morse Code, the code alphabet, how to send code, how to receive code, how to build and hook up a code practice oscillator.

Cat. No. 6-01. 32 pages . . . . . 50¢

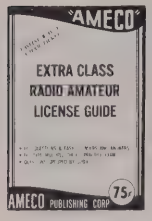
ADVANCED CLASS RADIO AMATEUR LICENSE GUIDE
by Martin Schwartz



This book contains a detailed, easy-to-understand answer for each FCC study question, plus a sample FCC-type examination, using multiple-choice questions, for the Advanced Class Amateur license examination. The material is grouped according to subject matter, making study easier.

Cat. No. 16-01. 32 pages . . . . . 50¢

EXTRA CLASS RADIO AMATEUR LICENSE GUIDE
by Martin Schwartz



This book contains a detailed, easy-to-understand answer for each FCC study question, plus a sample FCC-type examination, using multiple-choice questions, for the Extra Class Amateur license examination. The material is grouped according to subject matter, making study easier.

Cat. No. 17-01. 48 pages. . . . . 75¢

RADIO AMATEUR LOG BOOK

The Ameco log book uses a modern, simplified format in a small size (6" x 9") that makes logging an easy task. There are less columns to fill out and more room for other information. The book also contains the ARRL countries list and prefixes, the Q signals, the code for R-S-T reports, etc.

Cat. No. 14-01. 60 pages . . . . . 50¢

Code courses contain either 12", long play 33-1/3 RPM unbreakable records or 7", 45 RPM unbreakable records.

JUNIOR CODE COURSE

This Code Course prepares the prospective radio operator for the Novice and Technician code examinations. It contains ten lessons that go from start to 8 WPM. The course includes a typical FCC-type code examination, an instruction booklet on how to send and receive code the simplest, fastest way, charts to check receiving accuracy, etc.

Cat. No. 100-33 (33 RPM, 1 LP, 2 sides) $3.95
Cat. No. 100-45 (45 RPM, 5 records, 2 sides) $4.95

SENIOR CODE COURSE

This Course contains everything given in the Junior Code Course, plus twelve additional lessons to bring the prospective operator's code speed up to 18 WPM. It prepares one for the Amateur Novice, Technician, General and Conditional code examinations, as well as the Commercial Second Class Telegraph code examinations.

Cat. No. 101-33 (33 RPM, 2 LP, 2 sides) $7.50
Cat. No. 101-45 (45 RPM, 11 records, 2 sides). $8.50

ADVANCED CODE COURSE

This Course prepares the prospective operator for the General Class Amateur and the Second Class Commercial Telegraph code examinations. It contains the last twelve lessons of the Senior Code Course, as well as the FCC-type code examinations. Its speed goes from 8-1/2 WPM to 18 WPM.

Cat. No. 103-33 (33 RPM, 1 LP, 2 sides) $3.95
Cat. No. 103-45 (45 RPM, 6 records, 2 sides) $3.95

EXTRA CLASS CODE COURSE

This Course contains ten lessons. Its code speed is from 13 WPM to 22 WPM. It prepares one for the Extra Class Amateur and Second Class Telegraph code examinations. The sample FCC-type code examinations, as well as the code course booklet, are included.

Cat. No. 104-33 (33 RPM, 1 LP, 2 sides) $3.95

GENERAL CLASS SUPPLEMENTARY CODE COURSE

This Course contains five lessons of concentrated code practice material between 12 WPM and 15 WPM. This serves as additional code practice material for those studying for the General Class code examination. The code course booklet and sample FCC-type examinations are included.

Cat. No. 105-33 (33 RPM, 1 LP, 2 sides) $3.95

EXTRA CLASS SUPPLEMENTARY CODE COURSE

This Course consists of six lessons of concentrated code practice material between 19 WPM and 24 WPM. This serves as additional code practice material for those studying for the Extra Class code examination and the Second Class Commercial Telegraph code examinations. The code course booklet and sample FCC-type examinations are included.

Cat. No. 106-33 (33 RPM, 1 LP, 2 sides) $3.95

AMECO K4

DELUXE TELEGRAPH KEY is excellent for both the beginner or high-speed operator. Heavy base of brightly polished solid brass. Ball-bearing pivots give the key fast action. Fully adjustable for the right "feel". Standard 1-1/8" black knob, 3/16" contacts, knurled hardware. Circuit closing switch. Base 3" x 2", with 2 mounting holes $3.00

K-4

RADIO-ELECTRONICS

AMECO

COMMERCIAL RADIO

RADIO ELECTRONICS MADE SIMPLE
by Martin Schwartz

This book explains radio theory completely in a simple, non-technical manner. No previous radio background is required in order for the reader to understand the book. It starts with basic electricity and covers all phases of radio, right up through transmitters and receivers. It is an ideal book for the beginner, the serviceman, the electronics experimenter, the hi-fi enthusiast, etc.
Cat. No. 3-01. Approx. 200 pages. $1.95

DIGITAL COMPUTERS MADE SIMPLE
by Saul Heller

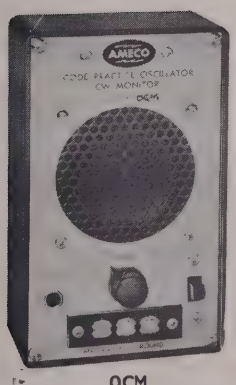
This book assumes that the reader has no previous knowledge of computers and starts at the very beginning. The subject matter is thoroughly covered in a simple, easy-to-understand manner. Some of the chapter headings are: Introduction to Computers, The Language of Computers, Bits and Words, Input, Output Devices, Computer Programming, Basic Circuits Used in Computers. Approx. 100 pages.
Cat. No. 18-01. (Publishing date Feb.1969). . $1.50

Available July 1969

TRANSISTOR THEORY AND CIRCUITS MADE SIMPLE
by Harvey Pollack

The theory of transistor action is described in a simple, straightforward manner. This book explains how transistors operate in amplifiers, oscillators and other electronic circuits. Many practical circuits using transistors are given. Values of parts are given so that one can actually build the circuits. This book is for servicemen, amateurs, experimenters and engineers. It is for everyone who wants a good understanding of transistors and their operation in various circuits.
Cat. No. 11-01. 128 pages. $1.75

CODE PRACTICE OSCILLATORS



OCM

706

AMECO MODEL OCM is a combination Code Practice Oscillator and CW monitor. Transistorized. Has a built-in speaker, tone control and headphone jack. The Monitor-Oscillator Switch allows operation as a CW RF Monitor without any connection to the transmitter.

Model OCMK, kit (less batteries) .....$ 9.95
Model OCMW, wired and tested (less batteries) 13.50

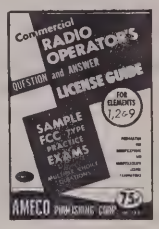
Eico 706 Code Practice Oscillator helps you learn to transmit and receive Morse Code. Extremely efficient built-in speaker provides clean, loud tone signal. Front-panel pitch control and headphone jack. Choice of tone or flashing light or both. Transistor oscillator operates from self-contained batteries. Tone Frequency is variable from 500 to 2000cps. 6½" high, 3¾" wide, 2¾" deep. Kit Form: $8.95 Wired and Tested: $13.95.

COMMERCIAL RADIO THEORY COURSE
by Martin Schwartz

Available Aug. 1969

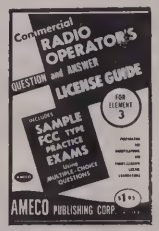
The Ameco Commercial Theory Course gives sufficient information to pass the FCC examination for the First Class Radiotelephone license, Second Class Radiotelephone license and Third Class Permit with Broadcast Endorsement. It is written in a simple, easy-to-understand manner. No technical background is required. It is a complete radio theory course, starting at the very beginning with basic electricity and continuing up through radio transmission and reception. There are 16 lessons and at the conclusion of each lesson, there are questions that are presented in exactly the same manner as on the FCC examination. In addition, there are practice FCC-type exams for each element. The questions in this course are of the multiple-choice type because the FCC uses this type of question on their examinations. It is actually a home study course and no other material is necessary. By going through this book carefully, a prospective operator should achieve the same results as though he had taken a home study course or residence course costing hundreds of dollars. Approximately 300 pages.
Cat. No. 15-01 (Publishing date May 1969) . . $3.95

COMMERCIAL RADIO OPERATORS QUESTION AND ANSWER LICENSE GUIDE, ELEMENTS 1, 2 and 9
by Martin Schwartz



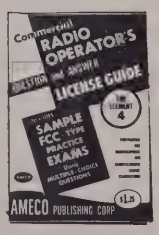
This book contains a simple, detailed answer for each FCC study question, plus sample FCC-type examinations, using multiple-choice questions for Elements 1, 2 and 9 of the Commercial Radio Operator License examinations. The prospective operator gets sufficient practice to enable him to pass the FCC examinations. Elements 1 and 2 fulfill the requirements for the Third Class Permit and are required for the other licenses. Element 9 satisfies the requirements for the Broadcast Endorsement.
Cat. No. 8-01. 48 pages . . . . . 75¢

COMMERCIAL RADIO OPERATORS QUESTION AND ANSWER LICENSE GUIDE, ELEMENT 3
by Martin Schwartz



This book contains a simple, detailed answer for each FCC study question, plus sample FCC-type examinations, using multiple-choice questions, for Element 3 of the Commercial Radio Operator License examinations. Elements 1, 2 and 3 fulfill the requirements for the Second Class Radiotelephone Operator License.
Cat. No. 9-01. 160 pages . . . . . .$1.95.

COMMERCIAL RADIO OPERATORS QUESTION AND ANSWER LICENSE GUIDE, ELEMENT 4
by Martin Schwartz



This book contains a simple, detailed answer for each FCC study question, plus sample FCC-type examinations, using multiple-choice questions, for Element 4 of the Commercial Radio Operator License examinations. Elements 1, 2, 3 and 4 fulfill the requirements for the First Class Radiotelephone Operator License.
Cat. No. 10-01. 80 pages $1.25

AMATEUR ELECTRONIC SUPPLY

4828 W. Fond du Lac Ave.; Milwaukee, Wis. 53216
Phone (414) 442-4200

STORE HOURS: Mon & Fri - 9 am to 9 pm; Tues, Wed & Thurs - 9 am to 5:30 pm; Sat - 9 am to 3 pm

EICO Model 717 ELECTRONIC KEYER

Kit $59.95 **Wired $89.95**

A fully automatic electronic keyer for CW hams. Capable of providing self-completing clean-cut dots, dashes, and spaces accurately timed and proportioned from 3 to 65 WPM in four switch-selected ranges, with vernier control of all speeds within each range. Output is a 25 volt-ampere dry reed SPST relay whose contacts are simply substituted for the key terminals of your rig. A built-in adjustable tone and volume oscillator with a 3" by 5" speaker enables monitoring transmissions, or permitting the 717 to act as a code-practice oscillator.

- Dot/Space Ratio — 1:1 electronically timed to within 2 milliseconds at all speeds
- Dash/Dot Ratio — 3:1 electronically timed to within 2 milliseconds at all speeds
- 100-130 VAC, 50-60 CPS, 40 watts
- Size (HWD): 5½" x 8" x 8¼" • WEIGHT: 9 lbs.

EICO 715 TRANS/MATCH" HAM CB TRANSCEIVER TEST SET

Kit $39.95 **Wired $59.95**

The new "TRANS/MATCH" is a professional test set that's designed for complete checking of both ham and CB equipment. Self-powered, it's excellent for both professional and hobbyist, in the shack or field.

SPECIFICATIONS: 100micro-amp meter for sensitive, accurate readings. Scuff-resistant vinyl finish, extruded aluminum polished panel. SWR: 1-30. TRUE RF POWER RANGES: 10 watts (5%); 50 watts (10%). Modulation percentage 0-100%. MODULATION DISTORTION: headphone jack output. Relative field strength 1-10. SIZE: (HWD) 4⅞" x 8⅛" x 3½". WEIGHT: 5 lbs.

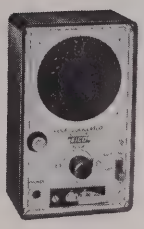
EICO 710 GRID DIP METER

Kit $34.95 **Wired $59.95**

The bandiest instrument for the service engineer, experimenter, ham shack and lab. Useful for trimming antennas to correct size, tuning transmitters, measuring circuit resonance, locating parasitic oscillations, determining capacitance, inductance and "Q" values. Can also be used as a wavemeter and transmitter monitor. Covers AM and FM broadcast bands, low and high mobile radio bands, citizens band and all ham bands through VHF. Employs 8 precision (1%) plug-in coils. This exceptionally stable instrument is essentially a precision VFO that can be used as a signal or marker generator. The most useful bench and field tool.

FREQUENCY RANGE: 400 kc to 250 mc. METER RANGE: 0-500 microamperes. ROTATING DRUM SCALE: 340° rotation. POWER REQUIREMENTS: 10 watts, 115 VAC, 60 cps. SIZE (HWD): 2¼" x 2¾" x 6⅞". WEIGHT: 3 lbs.

EICO 706 CODE PRACTICE OSCILLATOR



Kit $9.95 **Wired $14.95**

For learning to transmit and receive Morse code. Extremely efficient speaker provides clean, loud tone signal. Front-panel pitch control and headphone jack. Choice of tone or flashing light or both. Transistor oscillator operates from self-contained batteries. Can also be used as audio test instrument.

TONE FREQUENCY RANGE: 500-2000 cps (approx.) continuously variable. CONTROLS: Tone pitch adjust and selection of tone or light or both. TERMINALS: Key, phones. SIZE (HWD): 6½" x 3¾" x 2¾". WEIGHT: 2 lbs.

EICO 888 SOLID STATE ENGINE ANALYZER

Kit $49.95 **Wired $69.95**

Seven professional engine and ignition system tests in one. By simply hooking a couple of test leads to various points on your car or boat engine, you can instantly determine the condition of the battery, starter ignition coil, distributor, voltage regulator, alternator or generator — besides being able to check operation of any electrical device in the car or boat electrical system. Performs equally well on 4, 6, or 8 cylinder, 6 or 12 volts, positive or negative grounded systems. Self powered so it can be dash mounted for permanent installation both as a test set, or to provide continuous tachometer (RPM) indications.

- Adjust carburetor for correct RPM's and idling speed
- Set distributor points accurately—(Read dwell angle on meter)
- Gives true condition of coil and spark intensity
- Check output of alternator or generators (voltage and current)
- Set up voltage regulator unit for correct output
- Check diodes in alternator unit

SPECIFICATIONS: DWELL 0 to 45° for 8 cylinder, 0 to 60° for 6 cylinder, 0 to 90° for 4 cylinder engines: RPM — 0 to 1200 and 0 to 6000 for 4, 6, and 8 cylinder engines: VOLTAGE — 0 to 3.2 and 0 to 16 volts DC: OHMS — 0 to 20KΩ for general continuity and alternator diode testing: CURRENT — 0 to 90 amperes DC. SPARK — indicates condition of ignition firing circuits: SUB CONDENSER — provides a substitute ignition condenser. SIZE (HWD) 11½" x 6" x 5". WEIGHT: 6 lbs.

EICO®

EICOCRAFT

easy-to-build solid-state project electronic kits!

EICOCRAFT is a new exclusive original concept and product line designed and manufactured by EICO expressly for the purpose of introducing people of all ages to the exciting world of electronic kits.

For the beginner: Excellent introductions to the creative enjoyment of building professional kits.

For the educator: Easy, fast, educational, useful — and low-cost.

For the sophisticate: Convenient relaxing projects that are both "jiffy" and 100%-professional. Many projects are "expandable" by adding kits together — your imagination is the only limitation.

EICOCRAFT Are true electronic kits. They are **every bit as professional** in quality, performance and opportunity for **participation by the builder** as the 20-year famous EICO line of kits. Only the complexity has been reduced to make kit-building faster, easier, and less expensive. With EICOCRAFT you read **professional:** Instructions, illustrations, and schematic symbols. You handle only **professional** components. You perform **professional** tasks: assemble, solder, connect and enclose. You don't miss out on any ingredient of the self-expressive fun of building **professional** electronic kits.

- Modern **professional** all solid-state circuitry
- Pre-drilled copper-plated etched printed circuit boards
- The finest **professional** quality parts
- Easy comprehensive step-by-step instructions
- No technical knowledge or experience necessary

EICOCRAFT TruKits available Include:

EC-100 Electronic Siren Kit, $4.95 Powerful 3-transistor battery-operated alarm; emits a penetrating wail.

EC-101 Burglar Alarm Kit, $6.95 Powerful 3-transistor 6-volt battery-operated alarm; warning device against intruders.

EC-102 Fire Alarm Kit, $6.95 Thermosensor trips at about 135°F — activates powerful 3-transistor 6-volt battery-operated fire alarm.

EC-200 Electronic Intercom Kit, $5.95 Rugged 2-transistor battery-operated master intercom station for a 2-way communication system.

EC-300 Audio Power Amplifier Kit, $4.95 High quality battery-operated 3-transistor general purpose 2 watt audio amplifier.

EC-400 Electronic Metronome Kit, $5.95 Adjustable, 2-transistor precision battery-operated Metronome.

EC-500 Tremolo Kit, $9.95 Reliable 3-transistor battery-operated Tremolo for guitar and other musical instruments.

EC-600 Electronic Light Flasher Kit, $3.95 Rugged 2-transistor battery-operated "multivibrator" or "flip-flop" circuit.

EC-700 "Do Nothing" "Mystifier" Kit, $4.95 Amazing relaxation oscillator battery-operated set of 6 blinking lights.

EC-800 Photo Cell Nite Lite Kit, $4.95 Sensitive battery-operated photocell with a 2-transistor high-gain amplifier/switch.

EC-900 Power Supply Kit, $8.95 Reliable transformer-operated high current, transistor regulated, 6-volt DC output Power Supply.

EC-1000 Electronic Code Oscillator Kit, $2.50 2-transistor battery-operated code practice oscillator producing strong, sharp tones.

EC-1100 FM Wireless Mike $9.95 Pocket-size FM transmitter broadcasts **thru** any standard FM radio **without interconnecting wires.**

EC-1200 AM Wireless Mike $9.95 Pocket-size AM transmitter broadcasts thru any standard AM radio **without interconnecting wires.**

EC-1300 Electronic VOX (Voice-Operated Switch) $8.95 Battery-operated, transistorized amplifier & relay provides variable time delay & audio control of remotely operated devices.

EC-1400 Solid-State FM Radio (Broadcast Band) $9.95 Battery-operated, TUNEABLE. Use as personal radio; FM tuner.

EC-1500 Solid-State AM Radio (Broadcast Band) $8.95 Battery-operated, TUNEABLE. Use as a personal radio; AM tuner.

EC-1600 Solid-State Bongos $7.95 Electronically reproduce percussive sounds of bongos, tom-toms, etc. when touch plates are tapped.

EC-1700 Electronic VOX (Voice Operated Switch) $8.95 Audio activated relay amplifier and sensitive electromagnetic relay with adjustable time delay.

EC-1800 Electronic "TOX" Kit, $8.95 Battery operated precision transistorized touch-operated relay switch.

EC-1900 Treasure Finder, $9.95 Battery operated sensitive metal detector can be used to locate both ferrous and non-ferrous metals.

EC-2000 Electronic Organ, $9.95 8-Pushbutton battery operated one octave organ with built-in preamplifier. Feeds into any audio amplifier.

EC-2100 "Magic Switch", $9.95 Sensitive 2-transistor amplifier and latching flip-flop relay control circuit.

EC-2200 Electronic "EYE", $9.95 Sensitive light-operated relay switch. Ideal for warning alarm system, visitor indicator, etc.

EC-S Loudspeaker, $1.95 4" high efficiency 8 ohm loudspeaker, handles up to 1 watt, accessory for EICOCRAFT Kits (EC-100, 101, 102, 200, 300, 400, 1000).

Protect your car with EICO Auto Alarms

EICO 890 SIREN ALARM SYSTEM

Car lights flash on when activated.

$29.95

High powered siren alarm includes everything needed to burglarproof vehicle. Piercing, heavy-duty police-type siren. Siren has 4½" rotor; size 6¾" high; 5" dia. Six alarm activator switches. Relay switch unit. Tumbler lock, two keys. Wire, terminals, screws, In-Line fuse. Easy, speedy instructions. Install in half the usual time. Maximum protection at minimum cost. Weight: 4¾ lbs.

EICO 891 FLASHING HORN ALARM

Saves you 50%!
Pulsates horn instead of siren.

Only $14.95

The car sounds the alarm with its own howling horn — a big money-saving feature of this EICO economy alarm system!! Horns can be altered for different blasts! Kit includes standard tumbler lock, two keys. Six alarm activator switches. Two relay switch units; Horn flasher; Wire, terminals, screws. System compactly packaged 7½" long x 4" high. Wt. 2 lbs. Everything you need — at amazing low price. Save up to 50% in installation time. Easy-to-follow instructions included. No match at its price!

Your Eico Headquarters

AMATEUR ELECTRONIC SUPPLY

4828 West Fond du Lac Avenue
Milwaukee, Wisconsin 53216
PHONE (414) 442-4200

COLOR
B&W

EICO 460 WIDEBAND DC 5″ SCOPE

Kit $99.95 **Wired $149.95**

Ideal for color and B&W, TV servicing and production line testing, and excellent for audio and industrial work as well. Vertical amplifier with push-pull amplification (3 stages) and direct-coupling throughout. With internal calibration voltage and 4-position frequency-compensated decade attenuator, either dc or peak-to-peak ac (or combination) measurements may be made from 10mv to 500V. Instantaneous, drift-free positioning permits centering any part of an expanded trace. Intensity and focus controls, 60 cps output jack and phasing control, sawtooth (sweep) output jack, intensity modulation (Z-axis) input jack, and external capacitor jack for very low frequency sweeps are all on the front panel. DC balance and astigmatism adjustments are accessible without cabinet removal. Sync is fully automatic on all ranges and models, with automatic sync limiter and amplifier eliminating sync voltage adjustment. Full retrace blanking. Edge-lit calibration grid.

- 5mv rms/cm sensitivity
- DC to 4.5 mc flat response
- Vertical and horizontal TV sweeps

VERTICAL AMPLIFIER: Frequency response from dc to 4.5 mc, +1, −3db (usèful to 10 mc); sensitivity 5 mv rms/cm (25 mv p-p/cm); input impedance to 3 MΩ/35pf. HORIZONTAL AMPLIFIER: Frequency response from 1cps to 400 kc, + 1, −3db; sensitivity 0.24 v rms/cm; input impedance 5 MΩ/35pf. SWEEP RANGES: 10-100, 100-1K, 1K-10K, 10K-100K cps; plus EXT CAP position for very low frequency sweeps with external capacitor, TV-V position (30 cps) and TV-H position (7875 cps). Synchronization may be (+) or (−) internal, external, or line frequency. POWER REQUIREMENTS: 117VAC, approximately 95 watts. SIZE (HWD): 13″ x 8½″ x16″. WEIGHT: 29 lbs.

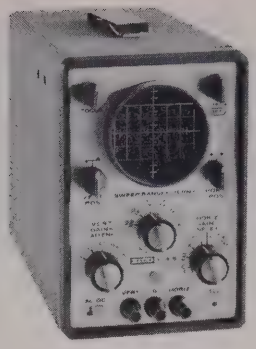
EICO 427 SENSITIVE DC 5″ SCOPE

Kit $99.95 **Wired $139.95**

A very sensitive, general purpose oscilloscope with the facilities and quality required for service, production, or R & D of audio communications and industrial equipment. Push-pull amplification (3 stages) and direct-coupling throughout vertical amplifier. With Zener diode calibration and 4-position frequency-compensated decade attenuator, either dc or peak-to-peak ac (or combination) measurements may be made from 10 mv to 500 v. The trace is sharp and clean, and free of "blooming." A trace may be expanded to 30 cm vertically and 20 cm horizontally, with instantaneous drift-free positioning to permit centering any part of expanded trace. Intensity, focus, astigmatism, dc balance controls and sawtooth sweep output are provided on the front panel; intensity modulation input is provided at the rear. Sync is fully automatic on all ranges and modes, with automatic sync limiter and amplifier eliminating sync voltage adjustment. Full retrace blanking.

- 3.5 mv rms/cm sensitivity
- Zener diode calibration
- Direct V plate connections

VERTICAL AMPLIFIER: Frequency response from dc to 500kc, +1, −3db (approximately −6db at 1 mc); sensitivity 3.5 mv rms/cm (10 mv p-p/cm); input impedance 1 MΩ/30pf. HORIZONTAL AMPLIFIER: Frequency response from 2 cps to 450kc, +1, −3db; sensitivity 0.18 V rms/cm; input impedance 10MΩ/40mmf. SWEEP RANGES: 10-100, 100-1K, 1K, 10K-100K cps. Synchronization may be (+) or (−) internal, external, or line frequency. POWER REQUIREMENTS: 117 VAC, approximately 55 watts. SIZE (HWD): 12½″ x 8½″ x 16¼″. WEIGHT: 28 lbs.



COLOR
B&W

EICO 435 WIDEBAND DC 3″ SCOPE

Kit $119.95 **Wired $169.95**

The Model 435 is really portable (⅓ the usual size of 5" scopes), yet provides outstanding facilities and fine performance. Push-pull amplification (3 stages) and direct-coupling throughout the vertical amplifier. With the Zener diode calibration facility and the 4-position frequency-compensated decade attenuator, either dc or peak-to-peak ac (or combination) measurements may be made from 50 mv to 500 V. Clarity and detail equal to 5" scopes are obtained with a far sharper and brighter trace (1600 V accelerating potential) on a flat-face, mu-metal shielded CRT, and distortionless V & H trace expansion is provided with drift-free V & H positioning up to many screen diameters. Sync is fully automatic on all ranges and modes, with automatic sync limiter and amplifier eliminating sync voltage adjustment. Full retrace blanking and edge-lit calibration grid are provided.

- Permanently accurate Zener diode calibration
- 18 mv rms/cm sensitivity
- DC to 4.5 mc flat response
- Vertical and horizontal TV sweeps
- Flat face, mu-metal shielded CRT

VERTICAL AMPLIFIER: Frequency response from dc to 4.5 mc, +1, −3db (useful to 10 mc); sensitivity 18 mv rms/cm (50 mv p-p/cm); input impedance 1 MΩ/35pf. HORIZONTAL AMPLIFIER: Frequency response from 1 cps to 500kc, +1, −3db; sensitivity 0.7 v rms/cm; input impedance 4 MΩ/40 pf. SWEEP RANGES: 10-100, 100-1K, 1K-10K, 10K-100K cps; plus TV-VERT position (30 cps) and TV-HOR position (7875 cps). Synchronization may be (+) or (−) internal, external, or line frequency. POWER REQUIREMENTS: 117 VAC, consumption approximately 110 watts. SIZE (HWD): 8½″ x 5¾″ x 12⅝″. WEIGHT: 15 lbs.

EICO®

NEW!

EICO 465 PROFESSIONAL 5″ OSCILLOSCOPE

Kit $179.95
Wired $249.95

This truly professional 5" scope, with its preset TV-Vertical and TV-Horizontal sweep positions (30 and 7875 Hz), is ideal for all aspects of color and b/w TV servicing. Push-pull amplification and direct-coupling assure minimum distortion and excellent frequency response (±1, −5dB) from DC to 8 MHz. An accelerating potential of 1400 V and a mu-metal neck shield help provide a sharp, bright trace. A built-in Zener-diode calibration source provides a precise and stable square-wave calibration voltage for DC or AC voltage measurements. Drift-free vertical and horizontal positioning as well as distortionless vertical and horizontal trace expansion up to many items the screen diameter are provided. An automatic sync circuit, insures a stable, steady display, even to 10 MHz, without sync voltage adjustments. Full retrace blanking and variable edge-lit calibration grid are provided. It can be used most effectively as a curve tracer in conjunction with the new EICO Model 443 (see page 17).

- DC — to 8 MHz (usable to 10 MHz)
- 5" flat-face CRT
- 12 mv rms/cm sensitivity
- Built-in calibration capability

SPECIFICATIONS: VERTICAL AMPLIFIER: Frequency response from DC to 8 MHz, +1, −5dB (usable to 10 MHz); sensitivity 12 mv rms/cm (34 mv p-p/cm); input impedance 1 MΩ35/pf; square-wave calibration voltage 200 mV p-p, ±1%. HORIZONTAL AMPLIFIER: Frequency response from DC to 1 MHz, +1, − 3dB; sensitivity 17 mv rms/cm; input impedance 1 MΩ/35pf. SWEEP RANGES: 10-100-1K, 1K-1 OK, 1 OK-100K Hz; plus TV-VERT position (30 Hz) and TV-HOR position (7875 Hz). Synchronization may be (+) or (−) internal, external, or line frequency. INTENSITY MODULATION INPUT: 3V rms blanking; input impedance 2.2 MΩ. TUBE COMPLEMENT: 2-6AU8, 2-12BY7, 1-12AZ7, 3-6BL8, 2-silicon diodes, 1-Zener diode, 1 CRT-5DEP. POWER REQUIREMENTS: 117 VAC, consumption approximately 140 watts. SIZE (HWD): 12¼″ x 8½″ x 17½″. WEIGHT: 27 lbs.

NEW!

EICO 443 TRANSISTOR-DIODE CURVE TRACER

Kit $69.95 **Wired $99.95**

Diodes, rectifiers, signal and power transistor characteristics can be tested by the versatile Model 443 curve tracer. Circuit designers and service technicians will find it invaluable for determining the DC characteristics of a wide variety of silicon and germanium semi-conductors. The output of the 443 can be displayed on any general-purpose oscilloscope. Diode and rectifier characteristics that can be tested include Forward voltage (V_f), Forward current (I_f), Reverse current (I_r), and Peak Inverse Voltage (PIV). The PIV test voltage is variable from 0 to 1400 V. Transistor tests include those for h_{FE}, h_{OE}, I_{CEO}, $V_{CE}(sat)$, and BV_{CEO}.

- All silicon solid state printed-circuit construction
- Dual transformers for isolation and safety
- Flashing light indicates high voltage at diode test terminals
- Matching switch for comparing and matching transistors
- Direct-reading beta controls on front panel
- Built-in oscilloscope voltage calibrators
- Terminals for connecting external test sockets

SPECIFICATIONS: TRANSISTOR TESTS: Beta (h_{FE}) displays family of 3 curves NPN/PNP: Signal Transistors (h_{FE}) at V_{CE}=10 volts I_C=12 MA.: Power Transistors (h_{FE}) at V_{CE}=10 volts I_C=1 amp.

DIODE/RECTIFIER TESTS — Peak Inverse Voltage (PIV) 5 Ranges — 1/10/50/100/200 Volts Per Division. Variable 0-1400 Volts Maximum. Reverse Current (I_R) — 3 Ranges -1/10/100 microamps per division. Forward Current (I_f) — 2 Ranges — 10/100 milliamps per division — 1 amp maximum. POWER REQUIREMENTS: 117 VAC 6 Watts. SIZE (HWD): 3″ x 11½″ x 9½″. WEIGHT: 10 lbs. U.L. APPROVED 3 wire grounded line cord.

EICO SCOPE ACCESSORY PROBES

OSCILLOSCOPE DEMODULATOR PROBE PSD

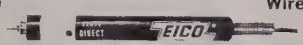
For signal tracing and checking TV/radio RF and IF stages.

Kit $4.50 **Wired $6.95**

OSCILLOSCOPE DIRECT PROBE PD

A direct test probe for low-frequency or low-impedance circuits.

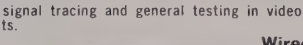
Kit $3.50 **Wired $4.95**



OSCILLOSCOPE LOW-CAPACITY PROBE PLC

For TV sync signal tracing and general testing in video sync and sweep circuits.

Kit $4.50 **Wired $6.95**

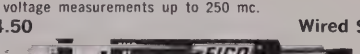


EICO VTVM ACCESSORY PROBES

RF VTVM PROBE PRF-11

For RF voltage measurements up to 250 mc.

Kit $4.50 **Wired $5.95**



HIGH VOLTAGE PROBE HVP-2

For safe high-voltage measurements up to 30,000 volts with any VTVM or 20,000 ohms per volt VOM.

Wired only $8.95

EICO EXCLUSIVE UNI-PROBE

A half-turn of probe tip selects DC or AC-ohms. For use with EICO 221 and other VTVMs.

Kit $5.95 **Wired $7.95**

*Input impedance of VTVM on DC ranges in megohms.

- **Built-in marker adder**

EICO 369 TV-FM SWEEP GENERATOR

Kit $99.95 **Wired $149.95**

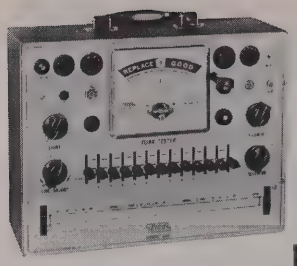
The finest of all TV-FM sweep alignment generators, the new EICO 369 has unequalled design features, including controllable inductor sweep, variable and crystal marker oscillators, and built-in marker adder. Provides easiest and fastest visual alignment of color and black-and-white TV sets and FM receivers.

The controllable inductor sweep circuit of the model 369 is purely electronic, with no mechanical parts to wear or cause trouble. Five fundamental sweep ranges are provided from 3 to 220 mc, with a 6:1 vernier dial for easy frequency setting. Retrace blanking and a 3-stage AGC circuit keep the amplitude of the swept signal constant, even when the widest sweep of 20 mc is used.

The variable marker generator has four ranges covering 2 to 225 mc (to 75 mc on fundamentals), with a 6:1 vernier dial for easy frequency setting. A crystal marker oscillator is also provided which turns on when crystal is plugged into panel socket. 4.5 mc crystal supplied for TV sound alignment.

- Circuit response not affected by markers
- Sweep signal only is fed to circuit being aligned
- Separate level controls for trace and marker size
- 4 range variable marker oscillator
- Crystal marker oscillator
- Built-in marker adder

SWEEP WIDTH: Continuously variable up to 20 mc depending on range. OUTPUT IMPEDANCE: 50 ohms. POWER REQUIREMENTS: 105-125 VAC, 60 cps, 50 watts. SIZE (HWD): 8½" x 12½" x 7". WEIGHT: 16 lbs.



EICO 628 CATHODE CONDUCTANCE TUBE TESTER

Kit $59.95 **Wired $79.95**

A high-quality cathode conductance tube checker with 12 individual-element lever switches to permit independent settings for all tube pins. Power-adjust rheostat permits testing independent of filament loading or line voltage variation. Pin straighteners for 7- and 9-pin miniature tubes conveniently mounted on panel. Circuit overload lamp indicates transformer overload.

- Tests the new tube types
- Individual element settings by lever switches
- Speed roll chart simplifies finding tube data

TYPES TESTED: 5-pin nuvistor, 7-pin nuvistor, 7-pin miniature, octal, loctal, combination 9- and 10-pin miniature, combination novar and pilot light, compactron (12-pin). CATHODE CONDUCTANCE TUBE TEST: Proportional reading of cathode conductance (emission) on 4½" meter with numerical and quality zone scales. SHORT TEST: Inter-element short and continuity tests with neon lamp indicator. POWER REQUIREMENTS: 105-135 VAC. SIZE (HWD): 9½" x 12½" x 4¼". WEIGHT: 11 lbs.

ACCESSORIES: L-1 Ld for regular carrying case. TTC-1 counter display case.

EICO 610A TUBE TESTER ADAPTOR

Wired $15.95

Adapts EICO Models 625 or 666 tube testers for testing these new tube types: nuvistor, 5-pin; nuvistor, 7-pin; novar; 10-pin miniature; compactron, 12-pin.

New EICO 615 TUBE TESTER ADAPTOR

Kit $5.95 **Wired $11.95**

Adapts EICO Models 628 and 667 tube testers for testing 4, 5, 6 or 7 pin tubes (older types), for which test sockets are not provided in those models.

EICO 667 DYNAMIC CONDUCTANCE TUBE & TRANSISTOR TESTER

Kit $89.95 **Wired $139.95**

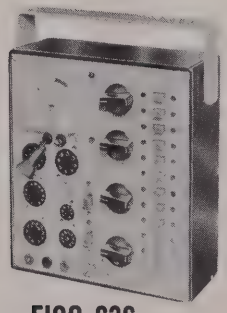
A dynamic conductance tube and transistor tester. Complete with rugged steel carrying case, matching steel cover, and carrying handle for easy portability. Tests all new tube types. Each active tube element can be individually connected to plate voltage, screen voltage, grid voltage, filament voltage, ground, or no connection. Multi-section tubes have each section individually tested by rapid push-button selection while all sections are drawing full-rated current.

- Tests the new tube types
- Separate plate, screen and grid voltages
- Individual element settings by lever switches
- Gear-driven roll chart for smooth operation

TYPES TESTED: 5- & 7-pin nuvistor, 7-pin miniature, 7-pin subminiature (in-line base), 8-pin subminiature, octal, loctal, combination 9- and 10-pin miniature, combination novar and pilot light, compactron (12-pin). In addition to receiving types, tests many small transmitting and special purpose tubes and npn and pnp signal transistors. TRANSISTOR TEST: two-step test for both npn and pnp signal transistors using internal DC power supply. DYNAMIC CONDUCTANCE TUBE TEST: Composite indication of mutual conductance, plate conductance, and peak emission capability. Readings are on both numerical and quality zone scales. Rectifiers tested near maximum rated current for extra accuracy. LEAKAGE/SHORT TEST: Direct-reading of inter-element leakage up to 20 MΩ. DC leakage test voltage is always applied in correct polarity to eliminate emission effects from readings. POWER REQUIREMENTS: 105-135 VAC. SIZE (HWD): 12" x 15" x 4½". WEIGHT: 20 lbs.

EICO®

NEW!



EICO 636 TUBE/BATTERY/CONTINUITY TESTER

Kit $29.95 **Wired $44.95**

- **A portable 3-in-1 combination at an amazingly low price.**
- **Excellent for general purpose technician/hobbyist use.**
- **Complete with bakelite case, handle, and tube data manual covering 800 tube types.**

This new versatile, combination instrument quick-tests 800 radio and TV tube types for cathode emission, leakage, shorts, opens, intermittents. Has sockets for octals, loctals, 7- and 9-pin miniatures, novars, nuvistors, compactrons. Special, fast Go/No-Go continuity test. Tests under load, commonly-used batteries from 1.5 to 90 volts in 11 ranges. Professional features include: transformer isolation power supply; large 3-color easy-to-read meter; and neon lamp short-indicator. 8⅝" H, 7½" W, 3⅛" D; 117 VAC; 60Hz; 4 lbs.

ATTENTION EICO TUBE TESTER OWNERS:
NEW TUBE DATA AND SUBSCRIPTION PLAN NOW AVAILABLE FOR ALL MODELS. Write to: EICO Tube Data Division, 1744 Rockaway Ave., Hewlett, N.Y. 11557

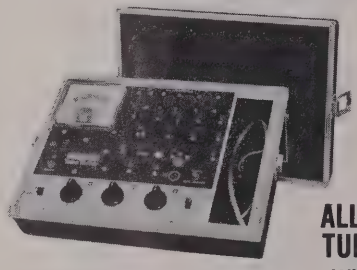
EICO TV PICTURE TUBE TEST ADAPTORS

CRA **Wired $4.50**
For testing 70°and90°picture tubes with 625 and 666 tube testers.

CRA — 110° **Wired $3.95**
For testing 110° picture tubes with 625 and 666 tube testers.

CRU **Wired $9.95**
For testing all color, black and white picture tubes with 667 or 628 tube testers.

NEW!



EICO 635 DELUXE PORTABLE ALL-PURPOSE TUBE TESTER

Kit $44.95 **Wired $69.95**

- "Take-it-anywhere" design expressed in a modern, rugged, scuff-proof, luggage case
- Thoroughly professional, full-range modern versatility. Tests all standard tubes and even the new decals, magnovals, 7-pin nuvistors, and all popular TV picture tubes

Tests for dynamic cathode emission, grid leakage, gas and shorts. 3½" D'Arsonval meter — protected against accidental overload or burnout — in a meter bridge circuit for long-term precision. Neon lamp indicators for shorts, grid leak, and power. Transformer isolation power supply.

- Compact (4"H, 12½"W, 9"D) and lightweight, 4½ lbs.
- Complete with luggage case and Tube Manual

680 TRANSISTOR & CIRCUIT TESTER

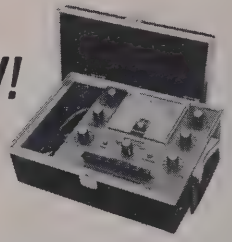
Kit $34.95 **Wired $49.95**

Versatile Transistor and Circuit Tester provides accurate measurement of basic transistor and diode characteristics required for quality testing, plus the VOM facilities normally required for testing and trouble-shooting transistor circuits.

- Measures transistor ICBO, ICEO, DC Beta
- 20 KΩ/V VOM for testing transistor circuits
- Simple criteria for all tests in manual; no charts needed
- Beta calibrate/zero ohms adjust prolongs battery life.

DC CURRENT ICBO/ICEO RANGES: 50uA, 500uA, 5mA, 500mA, DC VOLT RANGES: 5V, 50V. RESISTANCE RANGES: Rx1 (0 to 2KΩ, 12Ω center scale), Rx100 (0-200KΩ, 12Ω center scale), Rx10K (0 to 20MΩ, 120KΩ center scale). TRANSISTOR DC BETA RANGES: 2 to 30, 20 to 300. ACCURACY: ±3%, F.S.D. CONNECTORS: Three permanently connected clip-on test leads (C, B, E) or a panel socket for transistor connections; two banana jacks for VOM test leads. BATTERIES: 4-size AA, 1 Size C. SIZE (HWD): 6¾" x 5¼" x 3". WEIGHT: 3 lbs.

NEW!



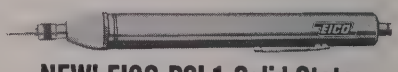
EICO 633 CRT TESTER & REJUVENATOR

Kit $69.95
Wired $99.95

- Continuity and leakage checked through transistorized VOM and read directly on meter.
- Check gray scale tracking ability.

The portable, all solid state Model 633, is designed to rapidly test and rejuvenate color as well as black and white picture tubes. The line adjustment control, 12 different filament voltages, the individual voltages applied to two of the grids, and the accurate meter, insure precise measurements. Many functions are conveniently performed by simply depressing the proper pushbutton. Among the possible tests are picture tube emission, cut-off voltage and life. Each color gun can be checked independently. The 633 can be used to safely repair the color or black and white tube by boosting the picture tube to life, removing shorts, and welding the cathode.

POWER REQUIREMENTS: 117 VAC. SIZE (HWD): 5¾" x 12⅝" x 9¼". WEIGHT: 9 lbs.



NEW! EICO PSI-1 Solid-State Signal Injector Probe

Kit $5.95 **Wired $9.95**

Now you can have a signal generator on your person wherever you go. No line cord, no bulk, no fumbling with probes. Pen-size, one-ounce, self-powered, self-contained signal generator covers 1,000 Hz with harmonics to 30 MHz. Perfect for on-the-spot signal tracing in the field. Helps trouble-shoot audio, IF & RF circuitry in any electronic equipment, transistorized or vacuum tube.

FREQUENCY: 1KHz approximately with harmonics to 30MHz. OUTPUT VOLTAGE: 50 volts peak-to-peak approximately, open circuit. OUTPUT IMPEDANCE: 10K ohm capacitive. INPUT DC VOLTAGE: 600 volts max. from output tip to case ground. POWER SOURCE: Two 1.5V batteries (Burgess No. NE, Eveready No. 912 or equivalent). SIZE: 5⅝" long x ½" O.D. WEIGHT: One ounce.

EICO 232 VACUUM TUBE VOLTMETER

Kit $34.95 **Wired $49.95**

Complete with exclusive UNI-PROBE® (U.S. Patent).

A professional quality VTVM for all TV/FM/AM servicing. Gives true peak-to-peak measurements of complex voltage waveforms on separate scales. Provides dynamic RMS and DC voltage measurements with negligible circuit loading. Resistance measurements up to 1000 megohms. Exclusive EICO Uniprobe selects all measurement functions.

- Exceptional stability and accuracy
- 7 non-skip ranges on every function
- Calibration without removing from cabinet
- 4½" meter in "can't burn out" circuit
- Zero center, 1% multipliers

PEAK-TO-PEAK AC RANGES: 0-4, 14, 42, 140, 420, 1400, 4200 volts. RMS SINE VOLTAGE RANGES: 0-1.5, 5, 15, 50, 150, 500, 1500 volts. DC VOLTAGE RANGES: 0-1.5, 5, 15, 50, 150, 500, 1500 volts (up to 30,000 volts with HVP probe). FREQUENCY RESPONSE: 30 cps to 3 mc (up to 250 mc with PRF probe). OHMMETER: 0.2 ohms to 1000 megohms. BATTERY: 1.5 volts. POWER REQUIREMENTS: 117 VAC, 60 cps, 5 watts. SIZE (HWD): 5½" x 5" x5". WEIGHT: 7 lbs.

EICO 249 DELUXE VTVM

With all outstanding features of Model 232 plus extra convenience and readability of big 7½" meter.

Kit $39.95 Wired $59.95

NEW!

EICO 235 PROFESSIONAL VTVM

Kit $49.95

Wired $69.95

The new Model 235 is especially qualified for the exacting measurements encountered in solid-state circuitry. Accurate down to as little as 0.01 volts on the large, easy-to-read 6" meter on its ½-volt scale! Peak-to-peak and RMS AC voltage are read on separate scales in 7 overlapping ranges, up to 4.2KV. With its frequency response of 30Hz to 3MHz (and up to 250MHz with optional probe).

Very high input impedance (more than 11 megohms) assures negligible circuit loading in precision DC voltage measurements from 0.01 volt to 1.5KV (in 8 overlapping ranges); and to 30KV with optional high voltage probe. (EICO Model HVP-2.)

- ½-Volt Full-Scale DC Transistor Servicing Range
- Deluxe Full-View 6" 200 Microamp Meter Movement

Quality features of the 235 include: ceramic switches, 1% precision resistors, seven resistance ranges 0.2Ω to 1000MΩ, zero center for TV-FM sound detector alignment; one zero adjustment for all functions and ranges; transformer-powered supply for line isolation, balanced-bridge circuit is for exceptional stability and accuracy.

8 DC Ranges: 0-0.5-1.5-5-15-50-150-500-1500 (to 30,000 volts with optional high voltage probe). 7 AC Peak-to-Peak Ranges: 0-4-14-42-140-1400-4200. 7 AC RMS Ranges: 0-1.5-5-15-50-150-500-1500. 7 Resistance Ranges: 0.2Ω to 1000MΩ. Frequency Response: 3 cps to 3Mc ±1db (up to 250Mc with optional PRF probe). Input Resistance: DC 11MΩ; AC 1M shunted by 60mmf. Power Requirements: 117 VAC, 50 or 60 cps; 6 watts. 1% precision multiplier resistors, 3% accuracy on AC and DC scales. 1 silicon rectifier, 1-12AU7A and 1-6AL5 tube. Dimensions (HWD): 8½" x 7½" x 5". Weight: 9 lbs.

EICO 488 ELECTRONIC SWITCH

Permits simultaneous observation of two patterns on one scope. Switching rate 10 to 2000 cps.

Kit $29.95 **Wired $49.95**

NEW!

EICO 378 AUDIO GENERATOR

Kit $59.95 **Wired $79.95**

Extreme versatility and positive error elimination are now yours for: testing audio amplifiers for gain and frequency response, as a signal source for various bridge measuring circuits, for modulation of RF signal generators, or any other application where a stable, accurate audio sine wave must be used. Precisely metered output controlled by 8 position decade and fine attenuators, fantastically low distortion and highly accurate, repeatable switch-selected frequencies from 1cps to 110kc, (by positive-setting detent switches—no interpretation needed!) All this in a man-sized instrument with well-spaced controls and a big 4½ inch meter easily read at normal working distance—a bench workhorse that takes you speedily through all your audio work without waste motion and annoying uncertainty. A bargain—pays for itself in the first job! For a complete audio test lab, team it up with the EICO 902 IM/HARMONIC DISTORTION METER.

- Switch selectable freq. output
- One cycle to 110kc
- Attenuated output in 8 steps
- Metered output voltage
- Excellent frequency resettability
- Built in 600 Ohm Load

SPECIFICATIONS: Switch selectable frequency output from cycles to kilocycles: one cycle steps (1-10cps); 10cycles steps (10-100cps); 100cycles steps (100-1kc); 1kc steps (1kc to 10kc); 10kc steps (10kc-110kc). FREQUENCY ACCURACY: ±5%. DISTORTION: Less than 0.1%, 20cps—20kc. OUTPUT VOLTAGE RANGES: 0-3, 10V into hi-z (10K min.); 0-.003, .01, .03, .1, .3, 1V into ext. 600 ohms load—or, with int. load, into external hi-z. OUTPUT METER ACCURACY: ±5% of full scale. POWER REQUIREMENTS: 120V, 50/60cps, 40watts. SIZE (HWD): 8½" x 12½" x 9" WEIGHT: 13 lbs.

EICO®

NEW!

EICO 385 SOLID STATE COLOR BAR GENERATOR

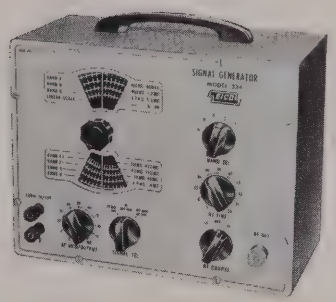
Easy-to-assemble kit $79.95

Wired $109.95

The value leader — professionalism at lowest cost — only from EICO. Versatile "go-everywhere," 5-function solid state color generator in tote-easy, battery-portable/storage case. Advanced computer-type circuitry provides serviceman-minded advantages. 3 temperature-compensated crystal oscillators on one double-sided pc board for drift-free stability, and easy accessability. Versatile color-coded gun killers in unique socket-adapter assembly (no more fumbling!), store right in the case. Clips directly to TV antenna terminals (fast and sure!). Generates standard offset carrier type stable 10-bar display plus precision dots, crosshatch, and individual series of V&H lines. Low-drain operation on 6 "C" cells (not supplied) or with optional AC adapter/trickle charger. 13 transistors, 6 diodes, 3 crystals. Unusually small: 2½"H, 8½"W, 8⅜"D; and light: 7 lbs. **Everything you need to do a fast, reliable job — and you save money too.**

- Completely portable, battery-operated solid state design
- Feeds directly to TV antenna terminals

SOCKET-TYPE GUN KILLERS, WHICH STORE IN THE CASE, ALLOW ONE COLOR OR ANY COMBINATION OF TWO OR MORE COLORS TO BE ELIMINATED FROM THE DISPLAY ON THE PICTURE TUBE.



EICO 324 RF SIGNAL GENERATOR

Kit $32.95 **Wired $44.95**

The latest generator achievement created by EICO's service-minded engineers — hailed as the best generator buy in the world. More features, more versatility, more range, more accuracy — more instrument — than many generators at 3 to 4 times its cost. For IF-RF alignment, signal tracing and trouble-shooting of TV, FM and AM sets all on fundamentals. Marker generator for alignment of new high-frequency as well as older low-frequency TV IF's. Invaluable for 400 cps sine wave audio testing, laboratory and experimental work. Turret mounted slug-tuned coils assure maximum accuracy.

- One generator covers the whole range of 150 kc to 435 mc
- ±1.5% frequency accuracy
- 6:1 vernier tuning knob and excellent spread at most important alignment frequencies
- Etched tuning dial, plexiglass windows, edge-lit hairlines—for utmost accuracy, convenience and professional appearance
- Colpitts RF oscillator directly plate-modulated by cathode follower for improved modulation
- Variable depth of internal modulation 0 to 50% by 400 cps Colpitts oscillator

FREQUENCY RANGE: 150 kc-145 mc in 6 fundamental bands; one harmonic band, 111-435 mc. RF OUTPUT: 100,000 uV. AF OUTPUT: 10 volts. POWER REQUIREMENTS: 117 VAC, 60 cps, 8 watts. SIZE (HWD): 8" x 10" x 4¾". WEIGHT: 8 lbs.

EICO 377 AUDIO GENERATOR

Kit $39.95 **Wired $54.95**

A sine and square wave generator expressly designed to fill the test instrument needs of the audio engineer, high-fidelity enthusiast and the radio-TV serviceman. Its many modern features and its advanced circuitry and design make it particularly suitable for electro-acoustic experimentation, development work, as well as for TV service and wide-band amplifier work.

The 377 is another EICO exclusive instrument achievement and provides the equivalent in quality of separate professional sine and square wave generators each costing more than the 377 alone! Ideal for amplifier testing and design, determining radio receiver fidelity and loudspeaker response and square wave testing of TV receivers. May also be used for development of filter or compensating circuits and for making frequency measurement in conjunction with an oscillator.

- High power output over wide range of loads
- Constant output over wide frequency range
- Resistance-capacitance (Wien Bridge) oscillator circuit with 1% precision resistors
- Excellent calibration accuracy, stability, and purity of waveform
- Choke filtering in power supply for minimum hum level

FREQUENCY RANGE: Sine wave 20-200,000 cps in 4 bands; square wave 60-50,000 cps. CALIBRATION ACCURACY: ±3% or 1 cps. FREQUENCY RESPONSE: ±1.5 db 60-15,000 cps. OUTPUT: 10 V across 1000 ohms. DISTORTION: Less than 1%. POWER REQUIREMENT: 117 VAC, 60 cps, 50 watts. SIZE (HWD): 7⅛" x 11⅛" x 7⅝". WEIGHT: 13 lbs.

TRUVOHM PROFESSIONAL PORTABLE MULTIMETERS by EICO

AVAILABLE WIRED ONLY

- The industry's greatest VOM values
- Designed and manufactured to EICO's high standards of professionalism
- Each model complete with batteries and test leads
- Backed 100% by famous EICO warranty

100,000 OHMS/VOLTS
Model 100A4 $34.95

optional carrying case $5.95

The best buy in a bench-size multimeter . . . laboratory accuracy and professional versatility — at lowest cost. With DC sensitivity of 100,000Ω/V & AC sensitivity of 12,500Ω/V, the 100A4 combines extremely minimal circuit loading with wide-ranging functional utility, satisfies the precision and flexibility requirements of electronic engineers, experimenters, hams, and technicians. All the features you expect in a fine quality laboratory instrument are also present: double-jewelled ±2% D'Arsonval meter movement; full-view 4-inch mirror-back two-color scale eliminates reading parallax; matched pair of silicon diodes prevents accidental overload of meter movement. High-impact, custom-molded case protects against shock; integral handle for convenient positioning and portability. DC VOLTAGE: 0-500mV, 2.5, 10, 50, 250, 500 and 1000 volts. AC VOLTAGE: 0-2.5, 10, 50, 250 and 1000 volts. DC CURRENT: 0-10uA, 250uA; 2.5mA; 25mA; 250mA; and 10 Amp. RESISTANCE: 0-20KΩ; 200KΩ; 2 meg; 20 meg. DECIBELS: −20 to +62 in 5 ranges. ACCURACY: 2% Meter movement. INPUT RESISTANCE: 100,000 ohms/volt DC; 12,500 ohms/volt AC. 7½H x 5¼W x 3½D.

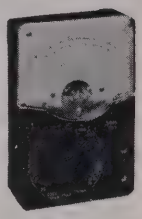
Model 30A4 — $19.95

Laboratory precision and professional versatility — A best buy! This laboratory-type, wide-range multimeter has a mirror-back scale to eliminate reading parallax, ±1% temperature-stabilized resistors, and double-jewelled ±2% D'Arsonval meter movement protected against accidental overload by matched silicon diodes. For minimal circuit loading, has 30,000Ω/volt DC and 10,000Ω/volt AC characteristics. Custom-molded, high-impact plastic case. Has separate input for measuring AC voltages in presence of DC. DC VOLTAGE: 0-0.6, 3, 12, 60, 300, 1200, 3000 volts. AC VOLTAGE: 0-6, 30, 120,600, and 1200 volts. DC CURRENT: 0-30uA; 60mA; and 600mA. RESISTANCE: 0-10KΩ; 1MΩ; 10MΩ; 100MΩ. DECIBELS: −20 to +63 in 5 ranges. SENSITIVITY: 30,000 ohms/volt DC; 10,000 ohms/volt AC. 5⅞H x 3¾W x 1⅝D.

Model 30A3 — $15.95

Has all the professional features of a fine high-priced multimeter including anti-parallax mirror-back scale, double-jewelled ±2% D'Arsonval meter, ±1% temperature-compensated precision film resistors, and 30,000Ω/V DC and 14,000Ω/V AC characteristics. Meter protected from accidental burnout by a dual silicon diode overload protection circuit. High-impact molded case. DC VOLTAGE: 0-0.6, 3, 12, 60, 300, 1200V. AC VOLTAGE: 0-12, 60, 300, 1200V. DC CURRENT: 0-60uA, 12mA. RESISTANCE: 0-10K, 1mΩ. 10mΩ. DECIBELS: −10 to 23 (good to 7 KC). ACCURACY: DC ±3%, AC ±4% of full scale. SENSITIVITY: 30,000Ω/V DC; 14,000Ω/V AC. 5⅛H x 3¾W x 1¾D.

Model 20A3 — $12.95



Packs 16 types of measurements in custom-molded high impact case. Having 20,000Ω/V DC & 10,000Ω/V AC characteristics, it's ideally practical for general, accurate, service. Easy-to-read meter has a rugged double-jewelled D'Arsonval movement. DC VOLTAGE: 0-0.25, 2.5, 10, 50, 250 & 1000 volts. AC VOLTAGE: 0-10, 50, 250, 50 & 1000 volts. DC CURRENT: 0-50uA. 25mA, 250mA. RESISTANCE: 0-7000 ohms, 700KΩ. & 7 megohms. DECIBELS: −10 to +36 db. ACCURACY: DC ±3%, AC ±4% of full scale. SENSITIVITY: 20,000Ω/V DC; 10,000Ω/V AC. 5⅛H x 3¾W x 1½D.

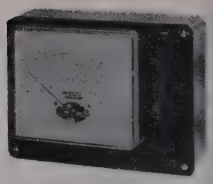
Model 4A3 — $9.95

This pocket portable is a versatile general utility instrument. Wide-visibility meter easily read in all 14 ranges. High-impact plastic case. DC VOLTAGE: 0-10, 50, 250, 1000 volts. AC VOLTAGE: 0-10, 50, 250, 500, 1000 volts. DC CURRENT: 0-250uA, 10mA, 250mA. RESISTANCE: 0-10KΩ and 1 meg. ohms. DECIBELS: −20 to +36 db. ACCURACY: DC ±3%, AC ±4% of full scale. SENSITIVITY: 4000Ω/V DC; 2000Ω/V AC. 4¾H x 3⅛W x 1⅝D.

Model 1A1 — $5.95

The go-everywhere shirt-pocket instrument for the busy technician/hobbyist. Rugged double-jewelled D'Arsonval meter & ±1% stabilized resistors are cushioned in high-impact plastic case. DC VOLTAGE: 0-15, 150, 1000 volts. AC VOLTAGE: 0-15, 150, 1000 volts. DC CURRENT: 0-150mA. RESISTANCE: 0-100,000 ohms. SENSITIVITY: 1,000Ω/V AC & DC. 3½H x 2⅜W x 1¼D.

EICO 567 VOM



- 20,000 ohms-per-volt sensitivity
- New 0.25 volt full-scale range allows accurate reading down to 0.005 volt
- Special silicon diode meter protection circuit

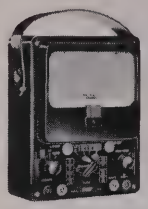
Kit $34.95 Wired $44.95

Engineered for maximum versatility not only for the high voltages used in vacuum-tube circuits, but its 0.25-volt full-scale range, makes it ideal for use in semi-conductor circuits. This finely constructed modern V.O.M uses EICO-exclusive ceramic switches to remove morona effects and avoid the possibility of damaging high-voltage breakdown. Large easy-to-read 4½", 50uA, sensitive meter.

SPECIFICATIONS: DC VOLTAGE: 0-0.25, 2.5, 10, 50, 250, 1000, 5000 volts. Sensitivity 20,000 ohms/volt. AC VOLTAGE: 0-2.5, 10, 50, 250, 1000, 5000 volts. Sensitivity 5000 ohms/volt. DC CURRENT: 0-100 uA, 10 mA, 100 mA, 500 mA, 10 amperes. DECIBELS: −12 to +55 in 5 ranges. RESISTANCE: 0-2000 ohms, 0.2 megohms, 20 megohms. METER: 4½", 50 uA movement. SIZE (HWD): 6¾" x 5¼" x 3". WEIGHT: 3 lbs.

EICO 565 V-O-M

optional Carrying case $5.95



Complete with batteries, less leads

- 20,000 ohms per volt sensitivity
- 31 range, 50-μv movement

Kit $25.95 Wired $34.95

The 565 volt-ohm meter is the famous performance-proven EICO multimeter design with world-wide recognition for excellence in laboratory and field work.

SPECIFICATIONS: DC VOLTAGE: Ranges 0-2.5, 10, 50, 250, 1000, 5000 volts. Sensitivity 20,000 ohms/volt. AC/OUTPUT VOLTAGE: Ranges 0-2.5, 10, 50, 250, 1000, 5000 volts. Sensitivity 1000 ohms/volt. DC CURRENT: 0-100 μa, 10 ma, 100 ma, 500 ma, 10 amp. DECIBELS: −12 to +55 db in 5 ranges. RESISTANCE: Ranges: 0-2000 ohms, 0.2 megohms, 20 megohms (.2 ohms to 20 megohms). METER: 4½" size, 50 μa movement. SIZE (HWD): 6¾" x 5¼" x 3". WEIGHT: 4 lbs.

EICO 555 V-O-M

Complete with leads, less batteries

Kit $25.95 Wired $34.95

A highly precise 20,000 ohms per volt volt-ohm meter. Similar to EICO 565 V-O-M except that it employs 1% presision resistors.

EICO®

EICO 536 V-O-M

optional Carrying case $5.95

Complete with batteries, less leads

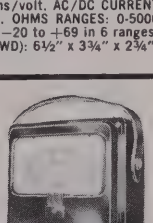
- 1,000 ohms per volt sensitivity
- Seven AC/DC voltage ranges

Kit $16.95 Wired $22.95

Considered the "tops" of its type, the EICO 536 gives you seven full-scale AC/DC ranges, to 5,000 volts. One unique feature of the 536 is the 0-1 volt full scale range, making possible accurate low voltage readings.

SPECIFICATIONS: AC/DC VOLTAGE RANGES: 0-1, 5, 10, 50, 100, 500, 5000 volts. AC/DC SENSITIVITY: 1000 ohms/volt. AC/DC CURRENT RANGES: 0-1 ma, 10 ma, 0.1 amp, 1 amp. OHMS RANGES: 0-5000 ohms, 100K ohms, 1 megohm. DB RANGES: −20 to +69 in 6 ranges. METER: 3" size, 400 μa movement. SIZE (HWD): 6½" x 3¾" x 2¾". WEIGHT: 3 lbs.

EICO 566 V-O-M



Complete with batteries, less leads

- 1000 ohms per volt sensitivity
- 4½" meter with 2-color scales

Kit $19.95

Wired $27.95

566 Volt-Ohms-Milliameter possesses all the excellent circuitry and application advantages of the 536, plus seven extra ranges. Added to this is the convenience of the large 4½" meter with 2-color scales.

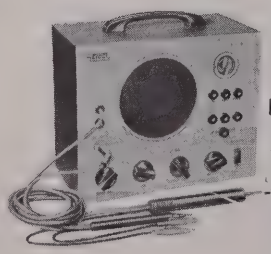
SPECIFICATIONS: AC/DC/OUTPUT RANGES: 0-1, 5, 10, 50, 100, 500, 5000 volts. AC/DC SENSITIVITY: 1000 ohms/volt. AC/DC CURRENT RANGES: 0-1 ma, 10 ma, 0.1 amp, 1 amp. OHM RANGES: 0-5000 ohms, 100K ohms, 1 megohm. DB RANGES: −20 to +69 in 6 ranges. METER: 4½" size, 400 μa movement. SIZE (HWD): 6¾" x 5¼" x 3". WEIGHT: 3 lbs.

EICO 556 V-O-M

Kit $21.95 Wired $29.95

A precise 1000 ohms per volt V-O-M. Similar to EICO 566 except that it employs 1% precision resistors.

EICO 147A DELUXE MULTI-SIGNAL TRACER



Kit $34.95 Wired $49.95

A professional deluxe instrument with unsurpassed facilities for extra-fast, profitable servicing of AM, FM and TV receivers. Two separate input channels assure maximum adaptability for both RF and audio work. Magic eye tube and speaker provide both visual and aural monitoring. Satin finish aluminum panel and gray wrinkle steel case.

- Separate input channels for RF and audio
- Shielded RF crystal demodulator and direct probes
- Calibrated wattmeter to detect abnormal power consumption
- Output for VTVM or oscilloscope
- Transformer operated for isolation and safety
- Visual and aural signal monitors

POWER REQUIREMENTS: 105-125 volts AC, 60 cps, 40 watts. SIZE (HWD): 8" x 10" x 4¾". WEIGHT: 10 lbs.

EICO 944 FLYBACK TRANSFORMER & YOKE TESTER

Kit $29.95 Wired $39.95

Provides a positive check, in just a few seconds, on all types of flybacks and yokes, both in and out of the circuit. Operates on extremely sensitive grid-dip principle to show up even one shorted turn. Separate calibration settings for air-core and iron-core flybacks and yokes to assure accuracy in testing both types. Large, easy-to-read 4½" meter, with three colored scales. Compact construction for easy portability. Satin finish aluminum panel and gray wrinkle steel case.

TUBE COMPLEMENT: One 6K6. POWER REQUIREMENTS: 105-125 VAC, 60 cps. SIZE (HWD): 7" x 5" x 4". WEIGHT: 5 lbs.

EICO 540 HOME APPLIANCE READI-TESTER

Kit $15.95 Wired $19.95

An all-purpose multi-range AC/DC voltmeter, ammeter, ohmmeter, voltmeter and leakage checker. Designed expressly for "do-it-yourself" home appliance and automotive repair work. Ideal for finding defects in irons, fans, heaters, TV & radio tubes, batteries and ignition coils.

Panel outlet permits metering current up to 15 amps drawn by any appliance, motor or similar device. Switch permits checking effect on line voltage. Direct reading kilowatt scale. Provides "GOOD-BAD" readings on 6V and 12V automobile storage batteries.

VOLTAGE RANGE: 0-300 AC/DC. CURRENT RANGE: 0-15 amps. SIZE: 3¾" x 6½" x 3½". WEIGHT: 3 lbs.

EICO 584 BATTERY TESTER

Kit $9.95 Wired $12.95

For fast and accurate checking of dry-cell batteries of the type normally used in portable radio, flashlights, hearing aids, and photoflash equipment. Provides a true dynamic test from 10 test positions. Supplied complete with test leads in sturdy, impact-resistant bakelite case.

Rotary switch selects voltage for battery under test and inserts proper resistor in series and in shunt with meter to simulate actual operating conditions.

TEST POSITION (VOLTS): 1.5, 4.5, 6.0, 7.5, 9.0, 22.5, 45, 67.5, 90, spare position. SIZE (HWD): 6¼" x 3¾" x 2". WEIGHT: 2 lbs.

EICO 1030 REGULATED POWER SUPPLY

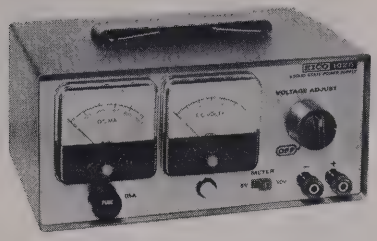
Kit $69.95 **Wired $99.95**

Combines the best features of the best supplies around, plus has a few extra facilities nobody else offers. Speeds trouble-shooting, design work, production line testing and electronics teaching. Operates simply. Flick the switch, twist a knob and the 1030 delivers exactly the output needed to test any design idea, or track any intermittent. Provides bias and plate voltages regulated to ⅓ of 1%, and a variety of filament outputs. A big value must for your bench, at a low price.

- Regulated B+ power supply 0 to 400volts DC, continuously variable
- Bias voltage supply 0 to 150volts DC, continuously variable
- Filament voltages 6.3 and 12.6VAC
- Ripple less than 3MV RMS
- Two monitoring, switchable D'Arsonval panel meters, voltmeter and milliammeter, double jeweled

SPECIFICATIONS: Regulated B+ 0-400VDC: 0-100ma continuous, 0-200 volts; 0-150ma continuous, 200-400 volts. Ripple less than 3MV RMS; output impedance less than 10 ohms from DC to 1 mc. BIAS VOLTAGE SUPPLY: 0 to 150V; Current 0-2ma. FILAMENT VOLTAGE: 6.3VAC @ 3amps., 6.3VAC Center Tapped @ 3amps., 12.6VAC @ 3amps (Series connecting two 6.3VAC outputs), 6.3VAC @ 6 amps (Parallel connecting two 6.3VAC outputs). POWER REQUIREMENTS: 105-125VAC, 50/60cycles, 160watts. SIZE (HWD): 8½" x 12½" x 9". WEIGHT: 21 lbs.

NEW!



EICO 1025 SOLID STATE POWER SUPPLY

Kit $34.95 **Wired $49.95**

Two D'Arsonval meters monitor the output voltage and current of this highly versatile, all-transistor DC power and bias supply. The Model 1025 provides a stable output voltage that is continuously variable from 0 to 30V. The output of the unit is monitored by a dual-range voltmeter, having ranges of 0-6 and 0-30 VDC, as well as a 500 mA milliameter. Maximum continuous load current is 150 mA in the 0-12 V range, 200 mA from 12-24V, and 300 mA from 24-30 V. Maximum ripple at full load is only 0.005%. Fused for protection against short circuits. Fuse will blow in case of short circuit to protect unit. Pilot lamp will remain lit even when fuse is blown but voltmeter will read zero. Included among the numerous applications for the 1025 are servicing of transistor or vacuum tube devices, TV and radio alignment and adjustment, recharging of small batteries, and light electroplating.

- Variable output voltage
- Output voltage monitored by dual-range voltmeter
- Load current measured by accurate milliameter

OUTPUT VOLTAGE RANGE: 0-30 VDC, continuously variable. MAX. OUTPUT CURRENT. CAPACITY (CONTINUOUS): 150 mA from 0-12 V, 200 mA from 12-24 V, 300 mA from 24-30V. FUSE: ½ amp. METERS: Voltmeter—0-6 and 0-30; Milliameter—0-500 mA. RIPPLE: (120 cps): 0.005% at full load. POWER REQUIREMENTS: 117V, 60 cps. SIZE (HWD): 3¾" x 8" x 4¾" WEIGHT: 5 lbs.

EICO 1064 LOW RIPPLE BATTERY ELIMINATOR AND CHARGER

Kit $49.95 **Wired $64.95**

A powerful, heavy-duty, two-range battery eliminator for servicing any auto radio, mobile and marine radio transceiver, including transistor and hybrid types. May also be used as a charger for 6 or 12-volt storage batteries. A variable transformer provides continuous output voltage adjustment on both ranges, and two meters permit simultaneous observation of output voltage and current. A pi-type LC filter in the output includes a heavy-duty choke designed to handle the full-rated continuous and higher intermittent current output on either range. The circuit includes heavy-duty selenium rectifiers, a primary fuse in an extractor post mounting, and an automatic reset overload relay in the secondary. Compact construction and smart professional appearance enhance this unit.

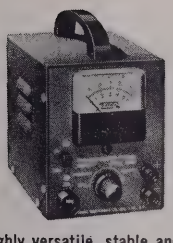
"Our checks showed the instrument's residual ripple to be low enough to permit its use with any transistorized device from the pocket portable to automobile hybrid receivers."

— ELECTRONICS ILLUSTRATED

- Two DC voltage ranges, 0-8 and 0-16 volts
- Automatic switching of ammeter range with selection of voltage range
- Fused transformer primary

DC OUTPUT VOLTAGE RANGES: 0-8 volts, 0-16 volts. CURRENT RATINGS: 0-8 volt range: 10 amps continuous, 20 amps intermittent; 0-16 volt range: 6 amps continuous, 10 amps intermittent. AC RIPPLE: 0-16 volts range: 0.3% @ 2 amps, 1% @ 6 amps, 1.5% @ 10 amps; 0-8 volt range: 1.5% @ 2 amps, 2% @ 6 amps, 4.5% @ 10 amps. METERS: Voltmeter — 0-20 volts. Ammeter — 0-10, 0-20 amps. POWER REQUIREMENTS: 117 volts AC, 60 cps; 150 watts. SIZE (HWD): 8½" x 5¾" x 7½". WEIGHT: 14 lbs.

EICO®



EICO 1020 SOLID STATE POWER AND BIAS SUPPLY

Kit $25.95
Wired $34.95

Highly versatile, stable and reliable, the EICO 1020 is a completely transistorized, very low ripple, portable DC power and bias supply. Ideal for operating transistor radios, hearing aids, preamplifiers, and other transistor devices in testing and servicing. Also provides a variable bias supply to bias transistors and vacuum tubes in lab work. Use it as a bias box to offset AVC and AGC voltages in the alignment of TV or radios, or to cut off the color burst amplifier in color TV adjustment.

- Dual range voltmeter 0-6 and 0-30 volts
- Maximum ripple at full load only 0.005%
- Maximum load current up to 300 ma in 24-30 volt range

OUTPUT VOLTAGE RANGE: 0-30 VDC continuously variable. OUTPUT CURRENT CAPACITY: 150 ma between 0-12V, 200 ma between 12-24V, 300 ma between 24-30V. FUSE: 0.5 ampere. RIPPLE: 0.005% at full load (120 cps). POWER REQUIREMENTS: 117 VAC, 60 cps. SIZE (HWD): 5" x 4" x 5½". WEIGHT: 5 lbs.

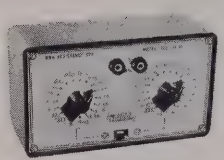
EICO 1060 LOW RIPPLE BATTERY ELIMINATOR AND CHARGER

Kit $45.95 **Wired $59.95**

Especially designed for servicing transistorized as well as vacuum tube equipment. For marine use, will operate boat lights, radio. Variable transformer has fused primary, automatic reset overload relay in secondary.

DC OUTPUT VOLTAGE: 0-8 volts, 0-16 volts. CURRENT RATINGS: 10 amps continuous, 20 amps intermittent. POWER REQUIREMENTS: 105-125 volts AC, 60 cps; 150 watts. SIZE (HWD): 8¾" x 10½" x 7¾". WEIGHT: 17 lbs.

EICO 1100 EIA RESISTANCE SUBSTITUTION



Kit $9.95 Wired $14.95

Enables rapid substitution of wide range of EIA resistance values from 15 ohms to 10 megohms in decade multiples of 15, 22, 33, 47, 68, 100 ohms. Uses standard 1 watt, ±10% EIA resistors. Convenient 5-way, jack top binding posts. Handsome satin aluminum front panel. SIZE (HWD): 3¾" x 6½" x 3½". WEIGHT: 2 lbs.

EICO 1120 EIA CAPACITANCE SUBSTITUTION

Kit $7.95 Wired $12.95

Enables rapid substitution of a wide range of EIA capacitance values from 0.0001 to 0.22 mfd in an operating circuit to determine value needed for optimum performance and to find value of badly damaged or illegible capacitors. Minimum accuracy ±10%. Uses silver-mica and molded plastic (or impregnated and sealed in plastic) capacitors, most conservatively rated at 600 volts. Convenient 5-way jack-top binding posts. Smart professional styling — satin finish aluminum panel. SIZE (HWD): 3¾" x 6½" x 3½". WEIGHT: 2 lbs.

EICO 1140 SERIES/PARALLEL R-C COMBINATION BOX*

Kit $15.95 Wired $24.95

A combination of the Model 1100 Resistance Box and the Model 1120 Capacitance Box with additional switching facilities that permit selection of any resistance alone, any capacitance alone, or any combination of resistance and capacitance in either series or parallel. Permits you to substitute or develop a desired integrating or differentiating RC network with a minimum of trouble. SIZE (HWD): 6¾" x 5¼" x 2⅜". WEIGHT: 3 lbs.

*U.S. Patent

EICO 1171 DECADE RESISTANCE BOX

Kit $24.95 **Wired $39.95**

An exceptionally accurate, wide range, versatile instrument, ideal for general design and development work. Useful for ohmmeter calibration and determining values for multiplier resistors. Provides 0-99,999 ohms in 1-ohm steps in 5 decades. Accuracy 0.5% at any setting. Comparator position permits instant substitution of actual equivalent component of the resistance. Housed in heavy gauge steel cabinet, with satin finish deep etched aluminum panel.

- Extremely wide range from 0 to 99,000 ohms
- Accuracy of 0.5% at any setting
- Comparator position permits instant substitution of actual equivalent component

RESISTANCE RANGE: 0-99,999 ohms in 1-ohm steps. DECADES: 5. RESISTOR STANDARDS: 0.5% accuracy, 1 watt rated power dissipation. SIZE (HWD): 12" x 3½" x 3". WEIGHT: 3 lbs.

EICO 1180 DECADE CONDENSER BOX

Kit $19.95 **Wired $29.95**

Useful in every laboratory as tuned circuit elements, bridge impedances, filter elements or components of any circuit where a wide-range variable capacitor is necessary. Range from 100 mmf to 0.111 mf with 1% accuracy. Employs positive detent ceramic wafer switches with silver-plated contacts. Smart professional styling.

- Accuracy ±1%
- Silvered mica precision capacitors
- Positive detent, ceramic wafer switches

RANGE: 100 mmf to 0.111 mf in increments of 100 mmf. VOLTAGE RATINGS: 350 VDC continuous, 500 VDC intermittent, 1000 VDC test. SIZE (HWD): 9" x 3½" x 3½". WEIGHT: 3 lbs.

EICO "CORTINA" 3070 SILICON SOLID STATE 70 WATT STEREO AMPLIFIER

Kit $99.95 **Wired $139.95**

A compact, powerful all silicon solid-state 70 watt stereo amplifier at a sensational low price! Features advanced design and smart styling typical of far more expensive components. Complete control facilities. Tape monitor, loudness contour, low and high cut filters, balance control and speaker systems switch.

- Finest selected silicon transistors used throughout
- Full complement of controls for every source
- No output transformers to limit frequency response
- Includes danish walnut vinyl clad steel cabinet

Specifications: • IHF Power Output: 70 watts with 4Ω speakers; 50 watts with 8Ω speakers. • Frequency Response: ±1.5db, 5 to 100,000 cps. • Harmonic Distortion: less than 0.8%. • Hum and Noise: 72db below rated power. Size (HWD): 3⅛" x 12" x 7¾". Weight: 8 lbs. UL Approved

NEW ULTRA-COMPACT BOOKSHELF SIZE COMPONENTS

"The compact dimensions and attractive styling appealed to us. The Cortina 3070 represents a wholesome trend away from "overblown" amplifiers which are much larger than need be. In fact, it is one of the very few we have seen which are actually suitable for bookshelf mounting."

Hirsch-Houch Labs.

NEW! EICO "CORTINA" 3150 ALL SILICON SOLID STATE 150 WATT STEREO AMPLIFIER

Kit $149.95, **Wired $225.00**

- Delivers a full 150 watts music power
- Distortion less than 0.15% at rated output
- New automatic short circuit protection for speakers and transistors
- Ideally suited compact design for bookshelf or cabinet installations

High fidelity authorities agree: The Cortina 3070 is the greatest stereo amplifier value for the money. Then why did we design the 3150? Because audiophiles who wanted **even more reserve power** asked us to. Now . . . only EICO gives you so much clean stereo power — plus complete preamplifier control facilities — at the industry's lowest price. It can drive with unblemished fidelity, two sets of stereo speakers, a tape recorder and stereo headphones from all program sources. In concept, design and construction the 3150 is everything the hi-fi enthusiast could ask for. The unexpected low price — a distinct Cortina attribute — is a unique EICO dividend.

SPECIFICATIONS: TOTAL MUSIC POWER: 150W into 4 ohm load; 97W into 8 ohm load. FREQUENCY RESPONSE: ±1.5 db 10Hz to 30kHz. HARMONIC DISTORTION: less than 0-15%. HUM AND NOISE: 75 db below rated output. RMS OUTPUT POWER: 100W into 4 ohm, 80 into 8 ohm; 50W into 16 ohm (total continuous). IM DISTORTION WITH 8 ohm LOAD: less than 1% at full power. SIZE (HWD): 3⅛" x 14⅜" x 8¼". WEIGHT: 16½ lbs.

EICO "CORTINA" 3570 ALL SOLID-STATE FM STEREO RECEIVER

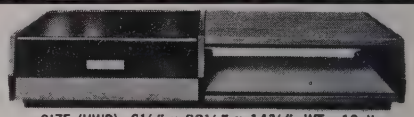
Kit $169.95 **Wired $259.95**

Price includes vinyl clad danish walnut cabinet.

The Cortina design philosophy — **total solid-state stereo performance at lowest cost** — is nowhere more beautifully expressed than in the NEW 3570. While exhibiting all the virtues of the Cortina 3070 Stereo Amplifier and the Cortina 3200 Stereo FM Tuner, the Receiver is far more than an additive summary of the two. Compare the Cortina's esthetics, controls and circuitry with any expensive receivers. You judge who gives you the most for your money. See specifications of Cortina 3070 and 3200.

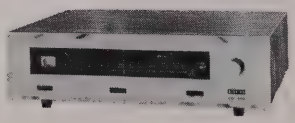
The Receiver As a Kit Is Easy To Build: FM section has RF, IF and MX all pre-assembled, pre-aligned — you build only the power supply. The amplifier section goes together easily on its several printed circuit boards.

SIZE: (HWD) 4⅛" x 16" x 9". WEIGHT: 14 pounds UL Approved



SIZE (HWD): 6¼" x 32½" x 14¾". WT.: 10 lbs.

EICO "CORTINA" 3200 SOLID STATE FM/MPX AUTOMATIC STEREO TUNER



Kit $99.95
Wired $139.95

- Excellent (2.4μV) sensitivity and stereo separation (40db)
- Prewired and prealigned RF & IF Sections & MPX sections
- 5 Tuned RF circuits & 4 double-tuned IF's
- Includes danish walnut vinyl clad steel cabinet

Quality-first extremely compact (3⅛" x 12" x 7¾") all Solid State FM Stereo Tuner assures you brilliant stereo FM reception. Perfect companion to "Cortina" 3070 Stereo Amplifier. Noiseless electronic switching automatically indicates stereo and switches to stereo mode. Precision D'Arsonval tuning meter, AFC switch and built-in SCA filter. Distortion less than 0.75%.

ELECTRONICS WORLD Magazine Says: "Its quality (Cortina 3200) was indistinguishable from that of several far more expensive tuners, and it pulled in a full complement of stations with quiet backgrounds, low distortion, and non-critical tuning.

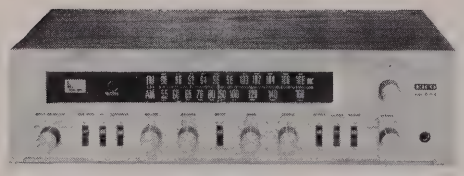
EICO HFS-8 SPEAKER SYSTEM

Wired Only $49.95

This is an excellent 2-way system for the critical music lover, employing an outstanding 8-inch woofer and a 1-inch diameter, 4 layered, long-throw voice coil. Frequency range is virtually flat from 40 Hz to 18,000 Hz, with a power handling capacity of 25 watts peak power. The system uses an **acoustic suspension design** of high efficiency. WEIGHT: 17 lbs.

SIZE (HWD): 13" x 22½" x 6½".

EICO®



NEW! EICO "CORTINA" 3770 ALL SOLID-STATE AM/FM STEREO RECEIVER

Kit $189.95 **Wired $279.95**

Price includes vinyl clad danish walnut cabinet.

Why should an audiophile be concerned about AM reception? Without question, FM (and especially automatic stereo FM, as offered here and in the Cortina 3570 receiver) is the far superior mode for high fidelity listening. But, there still are reasons for incorporating a professional AM facility: Some hi-fi enthusiasts, for example, live in areas where only a small number of FM stations are operating.

That's why the 3770 was designed. It's directly in the Cortina engineering tradition of **"Total Stereo Performance at Lowest Cost."**

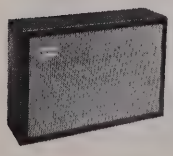
Like the Cortina 3570, **the 3770 is easy to build:** all RF, IF, Multiplex sections are supplied factory pre-assembled and pre-aligned. SIZE (HWD): 4⅛" x 16" x 9": WEIGHT: 14 lbs.

EICO "CORTINA" WE-78 DELUXE WALNUT COMPACT ENCLOSURE $39.95

Includes handsome smoked plexiglass dust cover.
For use with Cortina Stereo Receivers (3570, 3770) and any record changer/player (not supplied).

EICO HFS-10 SPEAKER SYSTEM

Wired Only $29.95



The HFS-10 is a small bookshelf size, true 2-way speaker system, using **acoustic suspension** to give unusually smooth performance over a very wide frequency range with a minimum of distortion. Capable of handling 20 watts peak power.

SIZE (HWD): 12" x 18" x 5¼".
WEIGHT: 11 lbs.

NEW! CORTINA® DELUXE PHONO/FM STEREO RECEIVER COMPACT KIT 3570-MS

Kit $239.95 **Wired $329.95**

The Cortina 3570 Solid-State 70-Watt Stereo FM Receiver, **plus** Famous Garrard 4-speed Synchro-Lab Automatic Record Changer, **plus** Magnetic Stereo Cartridge with Diamond Needle, **and** all coordinated in one beautifully crafted oiled walnut cabinet specifically designed for this purpose . . . all for less than you'd pay for the units separately.

When installation space is limited — but you don't want that to limit the high-fidelity capability of your equipment — **then the 3570MS is for you.** It incorporates exactly the identical full-capability, solid-state, editorially-praised 3570 Receiver that's described on preceding pages. The total compact system fits anywhere, (bookshelf, desktop, etc.); beautifies the decor of any room.

CIRCUITRY: The full-capability, Cortina 3570 Solid-State, 70-Watt FM Stereo Receiver; see page 8.

TURNTABLE: Garrard Automatic Model: Very low mass tone arm resists jarring, tracks even badly warped records; high-precision motor for speed accuracy.

CARTRIDGE: Magnetic with Diamond Needle, the finest for superlative performance and minimum record wear.

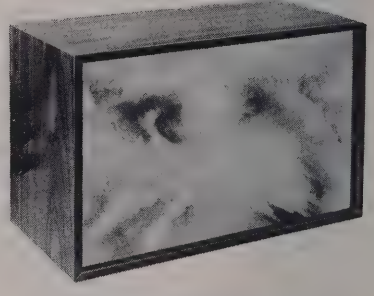
CABINETRY: Finest grade, hardwood with oiled walnut finish; factory-fabricated to fit the components above.

SIZE: (HWD) 6" x 17" x 15".

Now you can enjoy **CORTINA** music listening performance in a compact package at a budget price. **Easy-To-Build-Kit $239.95 — Factory Assembled $329.95.**

Introducing

Sound n' Color



CORTINA 3440 SOLID-STATE AUDIO COLOR ORGAN

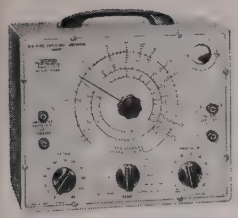
Kit $49.95 **Wired $79.95**

Sound n' Color is the new way, the today way to enjoy music. See every tone, every combination of instruments produce its own vivid multi-colored pattern. Through the miracle of solid-state electronics, the slightest rise and fall of pitch and volume in vocal or instrumental sound, effects an accompanying display of full-color excitement onto the screen.

The ever-changing color patterns are created by the always-varying intensity of 9 special lamps colored in the light primaries; red, blue and green. Their continuous intermixture creates a constantly moving panorama of all the colors of the spectrum. The intensity is controlled by silicon solid-state drivers and 2 externally adjustable frequency controls.

You determine the intensity of each color and its response to specific frequency ranges.

- Special low voltage, high-intensity colored lamps.
- Silicon solid-state lamp drivers for reliability and stability.
- All solid-state electronic system. No "color wheel" or motors are used.
- Adjustable color-crossover frequencies for precise color mixing.
- Transformer operated and fused for perfect safety.
- Connects to any 3.2 to 50Ω audio line. Will not affect the operation of your music system (Hi-Fi or Radio).
- Walnut Grain Cabinet. Size (HWD): 10" x 15" x 6", wt. 10 lbs.



EICO 950 RESISTANCE-CAPACITANCE BRIDGE

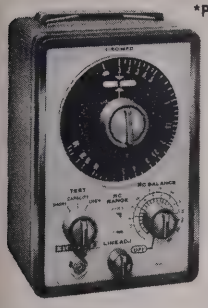
Kit $29.95

Wired $39.95

A versatile and truly useful service instrument for direct measurement of capacity or resistance over a wide range of values.

- Direct reading scale for capacitance and resistance
- Direct reading ratio scale for comparison measurements
- Magic eye tube provides sensitive leakage indicator
- Continuously variable polarizing leakage test voltage

CAPACITOR: 4 ranges, 10 uuf to 5000 uf. RESISTANCE: 4 ranges, 0.5 ohms to 500 megohms. COMPARATOR: 1 range, ratio from .05 to 20 (400 to 1). DC POLARIZING VOLTAGE: 0 to 500 volts DC (continuously variable) ±10%. TUBE COMPLEMENT: 1-1629.; 1-6x5. POWER REQUIREMENTS: 117 volts AC. 60 cps. SIZE (HWD): 8" x 10" x 4¾". WEIGHT: 8 lbs.



*Patent pending

EICO 955 BRIDGE TYPE IN-CIRCUIT CAPACITOR TESTER*

Kit $24.95

Wired $39.95

A truly advanced, highly dependable in-circuit and out- of- circuit capacitor tester. Provides extraordinarily sensitive open and short tests. Measures capacitors in or out of circuit, without unsoldering, between 0.1 mf and 50 mf. Checks for shorts and open circuits. Measures RC product, convertible into dissipation or power factor. Line adjust control provides maximum sensitivity regardless of line voltage variations.

Only one co-ax type test lead required for all tests.

CAPACITY MEASUREMENTS: 0.1 to 50 mf with 10% accuracy. SHORT TEST: Reliable up to 2000 mf with shunt resistance as low as 1 ohm. OPEN TEST: Checks capacitors as small as 15 mmf with normal adjustments, down to 5 mmf with constant voltage and internal adjustment. POWER REQUIREMENTS: 105-130 VAC, 60 cps, 8 watts. TUBE COMPLEMENT: EM84/6BG6, 6C4. SIZE (HWD): 8½" x 5¾" x 6". WEIGHT: 6 lbs.

EICO 380 A NTSC COLOR BAR GENERATOR

• Solid state
"Instant Operation"
• 4 pounds light

Wired only $225.00

Compact, inherently rugged solid-state color signal and dot bar generator. Provides precisely shaped, completely standard color signals essential for setting up and servicing color TV sets. Also generates dot-bar patterns required for other adjustments on both color and black-and-white sets. The only transistorized model providing completely standard, fully saturated NTSC color signals, including both chrominance and luminance signals exactly as specified.

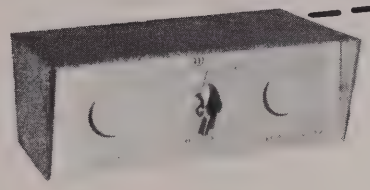
Exact luminance and chrominance are provided by gating and the use of 1% precision voltage dividers. Color burst is precisely gated and delayed to NTSC standards (8 to 10 burst cycles terminated within 10 usec. after leading edge of horizonal sync pulse). Phase angles of all colors permanently established to NTSC standards by taps on linearly distributed delay line, so that no adjustments are ever required.

- Individual, switch-selected color display
- Generates I, R-Y, Q and B-Y signals for hue and demodulator adjustment plus 7 standard color signals
- Adjustable bar width and dot size down to just visible
- 3 crystal controlled oscillators for color burst, convergence, RF

OUTPUT: 0 to 50,000 μV into 300 ohms (61.25 mc crystal controlled for TV Channel 3). VIDEO OUTPUT: Both positive and negative polarities, 0 to 10 V p-p into 4700 ohms. NTSC COLORS: Yellow, I, Red, R-Y, Magenta, Q, B-Y, Blue, Cyan, Green, White. HORIZONTAL LINES: 13 variable thickness. VERTICAL LINES: 10 variable thickness. CROSSHATCH: 13 horizontal and 10 vertical lines. DOTS: 130 variable size. POWER REQUIREMENTS: 117 VAC, 60 cps. SIZE (HWD): 8½" x 5¾" x 6⅜".

"WORTHINGHAM"

PHASAR 40



PHASED VERTICAL ANTENNA SYSTEM

Broadcast-magnitude performance for the 15 and 40 meter amateur bands! The Phasar-40 is a two element vertical array, featuring an electronically rotatable beam. A convenient phasing control in your shack provides instantaneous pattern selection to cover all compass points.

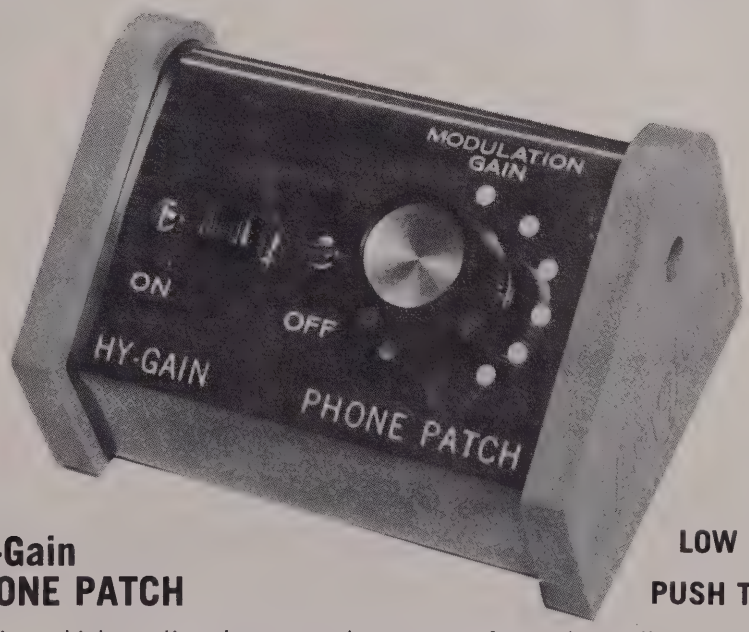
MECHANICAL SPECIFICATIONS

HEIGHT: 34 Feet
SPACING: 34 or 68 Feet
CONSTRUCTION: 7 Sections of 1.5" Dia. Max. x .065 Wall Telescoping Aluminum Tubing
MOUNTING: 1"-2" Dia. Pipe, No Concrete Necessary

ELECTRICAL SPECIFICATIONS

SWR: Under 2:1 Entire 15 & 40 Meter Bands
PHASING: 0^{o} and 180^{o}
PATTERN: Figure 8 or Cardioid
Front-To-Back: 35 db. Figure 8
20 db. Cardioid
MAX. ISOTROPIC GAIN: 9 db.

Price For Complete System: $89.95
80 Meter Adaptor Available Soon



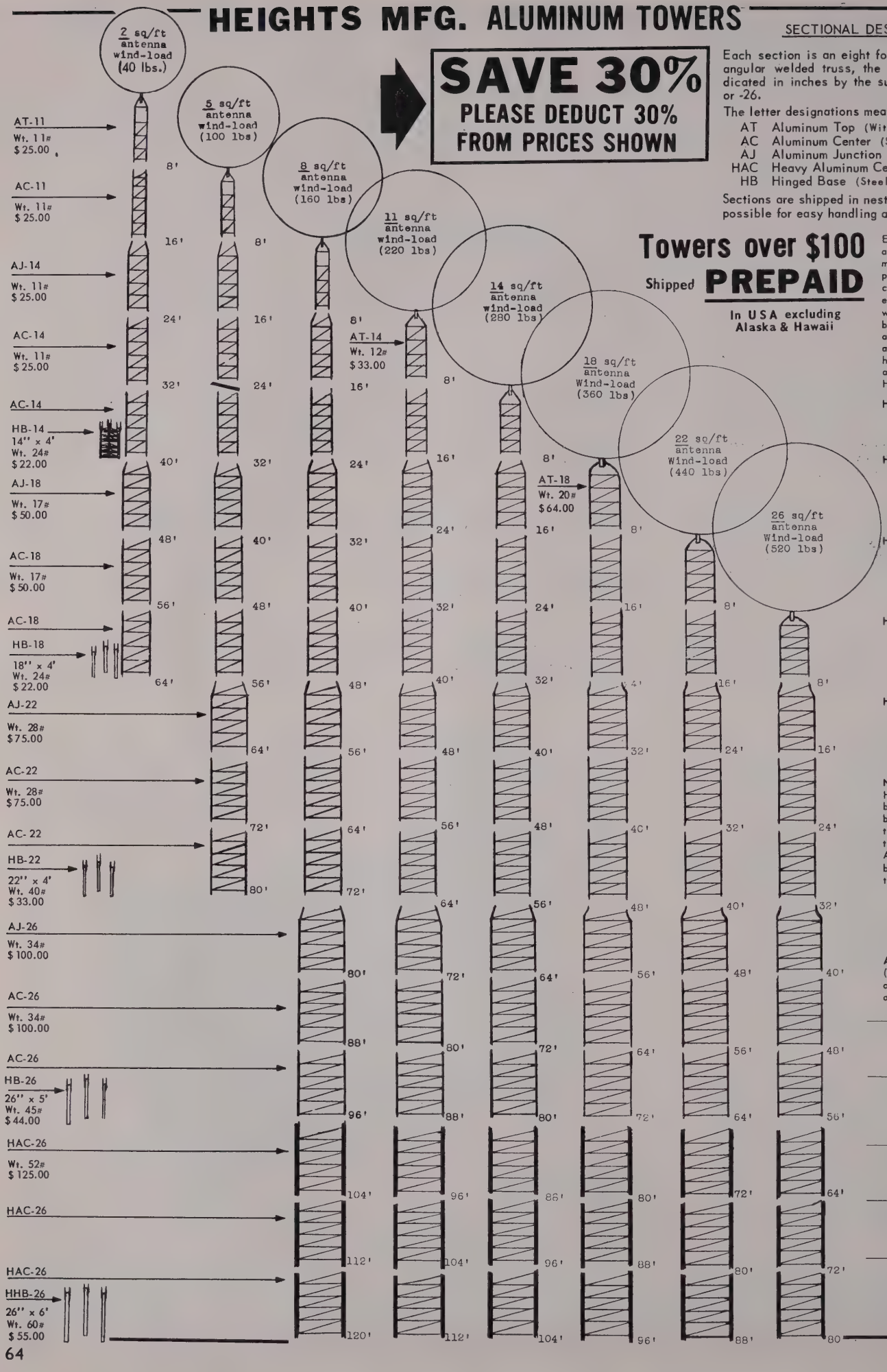
Hy-Gain PHONE PATCH

LOW COST

PUSH TO TALK

Here's a high quality, low cost phone patch for push-to-talk operation. It is housed in a rich wood-grained case with lustrous black plastic end plates. Takes little space - it's only 4¼" by 2¾". Simple and easy to install, all impedances are matched with a special built-in transformer. (Speaker 4-6 ohms, phone 600 ohms and high-impedance mike.) There are no complicated hybrid circuits. It's completely shielded for RF. This handsome unit has two controls – an on-off switch and mike gain control. **Order Hy-Gain No. 402 phone patch . . . . . $ 14.95**

HEIGHTS MFG. ALUMINUM TOWERS


2 sq/ft antenna wind-load (40 lbs.)
5 sq/ft antenna wind-load (100 lbs)
8 sq/ft antenna wind-load (160 lbs)
11 sq/ft antenna wind-load (220 lbs)
14 sq/ft antenna wind-load (280 lbs)
18 sq/ft antenna Wind-load (360 lbs)
22 sq/ft antenna Wind-load (440 lbs)
26 sq/ft antenna Wind-load (520 lbs)
AT-11 Wt. 11# $25.00
AC-11 Wt. 11# $25.00
AJ-14 Wt. 11# $25.00
AC-14 Wt. 11# $25.00
AC-14
HB-14 14" x 4' Wt. 24# $22.00
AJ-18 Wt. 17# $50.00
AC-18 Wt. 17# $50.00
AC-18
HB-18 18" x 4' Wt. 24# $22.00
AJ-22 Wt. 28# $75.00
AC-22 Wt. 28# $75.00
AC-22
HB-22 22" x 4' Wt. 40# $33.00
AJ-26 Wt. 34# $100.00
AC-26 Wt. 34# $100.00
AC-26
HB-26 26" x 5' Wt. 45# $44.00
HAC-26 Wt. 52# $125.00
HAC-26
HAC-26
HHB-26 26" x 6' Wt. 60# $55.00
AT-14 Wt. 12# $33.00
AT-18 Wt. 20# $64.00

SAVE 30%
PLEASE DEDUCT 30% FROM PRICES SHOWN

Towers over $100
Shipped **PREPAID**
In USA excluding Alaska & Hawaii

SECTIONAL DESIGNATIONS

Each section is an eight foot high equilateral triangular welded truss, the width of which is indicated in inches by the suffix -11, -14, -18, -22 or -26.

The letter designations mean;

- AT Aluminum Top (With Collar)
- AC Aluminum Center (Straight)
- AJ Aluminum Junction (Tapered)
- HAC Heavy Aluminum Center (Straight)
- HB Hinged Base (Steel)

Sections are shipped in nested bundles whenever possible for easy handling and storage.

Each of these towers, of any height up to the maximum recommended for the particular antenna load, can be climbed and stacked section by section or, where room permits, can be completely assembled and wired with the antenna at ground level and then hinged upright upon the appropriate self-supporting HINGED BASE.

HB-14 (Hinged Base for 14" sections.) No concrete is normally needed.

HB-18 (Hinged Base for 18" sections.) Should be set in about 1 cu. yd. of concrete. (3' x 3' x 3' deep)

HB-22 (Hinged Base for 22" sections.) Should be set in about 2 cu. yds. of concrete. (4' x 4' x 4' deep)

HB-26 (Hinged Base for 26" sections.) Should be set in about 4 cu. yds. of concrete. (4½' x 4½' x 5' deep)

HHB-26 (Hinged Base for heavy 26" section). Should be set in about 6 cu. yds. of concrete. (5' x 5' x 6' deep)

NOTE: The HB-18, HB-22, HB-26 and HHB-26 should be bolted in place to the bottom tower section and trued up vertically while the concrete is setting. Allow several days to set before erecting rest of tower.

Average WIND-LOADS (in terms of square feet) of the common types of TV and radio antennas.

____ Most TV and two-way radio antennas and small 2 & 6 meter beams. 2 sq/ft

____ Very large TV and two-way radio antennas, 6 & 10 meter beams and small tri-banders. 5 sq/ft

____ Medium 20 & 40 meter beams and medium tri-banders. 8 sq/ft

____ Large 20 & 40 meter beams and large tri-banders. 11 & 14 sq/ft

____ Very large 20 & 40 meter beams and various large multiple antenna arrays. 18, 22 & 26 sq/ft

HEIGHTS ALUMINUM TOWERS – PRICE LIST

Towers can be ordered as a package, for example; assume that the 20 lb. per sq/ft rating (80 MPH) is sufficient for the area and situation and that the antenna wind-load will not exceed 8 sq/ft projected area and that the tower must be 40 ft. high and must have a hinged ground base; then the specific tower to be ordered would be the A40w/HB (8 sq/ft). The price sheet below gives this tower a List Price of $197.00 and a weight of 91 lbs. In addition, the exact sectional composition of this tower is diagrammed on the inside of this sheet and can be used to order individual sections for extending the tower (follow the diagram exactly if the same antenna wind-load is to be maintained).

Please deduct 30% from LIST prices shown below.

Tower Package	2 sq/ft. Load		5 sq/ft. Load		8 sq/ft. Load		11 sq/ft. Load		14 sq./ft. Load		18 sq./ft Load		22 sq/ft. Load		26 sq/ft Load	
Designations	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.
A 32	$ 100.00	44#	$ 100.00	44#	$ 125.00	50#	$ 158.00	57#	$ 183.00	63#	$ 239.00	82#	$ 264.00	93#	$ 289.00	104#
A 32 w/ HB	122.00	68	122.00	68	147.00	74	180.00	81	205.00	87	272.00	122	297.00	133	322.00	144
A 40	125.00	55	150.00	61	175.00	67	208.00	74	258.00	91	314.00	110	349.00	121	389.00	138
A 40 w/ HB	147.00	79	172.00	85	197.00	91	230.00	98	291.00	131	347.00	150	382.00	161	433.00	183
A 48	175.00	72	200.00	78	225.00	84	283.00	102	333.00	119	389.00	138	449.00	155	489.00	172
A 48 w/ HB	197.00	96	222.00	102	247.00	108	316.00	142	366.00	159	422.00	178	493.00	200	533.00	217
A 56	225.00	89	250.00	95	300.00	112	358.00	130	408.00	147	489.00	172	549.00	189	589.00	206
A 56 w/ HB	247.00	113	272.00	119	333.00	152	391.00	170	441.00	187	533.00	217	593.00	234	633.00	251
A 64	275.00	106	325.00	123	375.00	140	433.00	158	508.00	181	589.00	206	649.00	223	714.00	258
A 64 w/ HB	297.00	130	358.00	163	408.00	180	466.00	198	552.00	226	633.00	251	693.00	268	769.00	318
A 72	2 sq/ft. configurations not recommended for these heights.		400.00	151	450.00	168	533.00	192	608.00	215	689.00	240	764.00	275	839.00	310
A 72 w/ HB			433.00	191	483.00	208	577.00	235	652.00	260	733.00	285	819.00	335	894.00	370
A 80			475.00	179	550.00	202	633.00	226	708.00	249	814.00	292	889.00	327	964.00	362
A 80 w/ HB			508.00	219	594.00	247	677.00	271	752.00	294	869.00	352	944.00	387	1019.00	422
A 88			5 sq/ft. configurations not recommended for these heights.		650.00	236	733.00	260	833.00	301	939.00	344	1014.00	379		
A 88 w/ HB					694.00	281	777.00	305	888.00	361	994.00	404	1069.00	439		
A 96					750.00	270	858.00	312	958.00	353	1064.00	396				
A 96 w/ HB					794.00	315	913.00	372	1013.00	413	1119.00	456				
A 104					875.00	322	983.00	364	1083.00	405						
A 104 w/ HB					930.00	382	1038.00	424	1138.00	465						
A 112					1000.00	374	1108.00	416								
A 112 w/ HB					1055.00	434	1163.00	476								
A 120					1125.00	426										
A 120 w/ HB					1180.00	486										

TOWERS OVER $100 shipped PREPAID

In USA excluding Alaska & Hawaii

TOWER ACCESSORY LIST

NOTE: All top sections normally carry $1^{9}/_{16}$" I. D. collar with set screws, as do mast collars of any size. Upon customer specification larger collars are available at no extra charge (except for the AT-11, which, designated the AT-11 mod., carries an extra List charge of $8.00). Following is a list of top section prices, if ordered as a separate item. Specify collar size, if other than standard.

Designation	Description	LIST PRICE	Wt.
AT-11	11" x 8', standard collar	$ 25.00	11#
AT-11 mod.	11" x 8', collar to 2½" I. D.	33.00	11#
AT-14	14" x 8', collar to 2½" I. D.	33.00	12#
AT-18	18" x 8', collar to 3" I. D.	64.00	20#
AT-22	22" x 8', collar to 4" I. D.	95.00	30#
AT-26	26" x 8', collar to 5" I. D.	125.00	35#
Mast, 1¼" O.D.	Hi-Tensile Alum, 8' x 14 ga.	8.00	3#
Mast, 1½" O.D.	Hi-Tensile Alum, 8' x 11 ga.	10.00	5#
Mast, 1¾" O.D.	Hi-Tensile Alum, 8' x 11 ga.	12.00	6#
Mast, 2" O.D.	Hi-Tensile Alum, 8' x 11 ga.	14.00	7#
Mast, 2" O.D.	Hi-Tensile Alum, 16' x 11 ga.	28.00	14#

Designation	Description	LIST PRICE	Wt.
RP-11	Rotor Post for AT-11, clamps to tower leg	$ 3.00	2#
RP-14	Rotor Post for AT-14, clamps to tower leg.	5.00	3#
RS-11	Rotor Shelf for AT-11, heavy duty, clamps to all three tower legs.	14.00	3#
RS-14	Rotor Shelf for AT-14, heavy duty, clamps to all three tower legs.	18.00	4#
RS-18	Rotor Shelf for AT-18, heavy duty, clamps to all three tower legs.	22.00	5#
NOTE: Above Rotor Shelves are drilled for the Ham-M			
HB-14(30")	Shorter version of HB-14, but must be used with concrete or wall brackets.	14.00	12#
HRM-14	Hinged Roof Mount for 14" guyed towers	14.00	8#
HRM-18	Hinged Roof Mount for 18" guyed towers	22.00	20#
HRM-22	Hinged Roof Mount for 22" guyed towers	33.00	30#
HRM-26	Hinged Roof Mount for 26" guyed towers	44.00	40#
SOHB	Screw-Operated Hinged Base, designated SOHB-18, SOHB-22 or SOHB-26, depending upon tower selection.	250.00	210#
FOK	Fold-Over Kit, designated FOK-18, FOK-22 or FOK-26, depending on section size at folding point.	200.00	125#

The SOHB (Screw Operated Hinged Base), an improved replacement for the WOHB (Winch Operated Hinged Base).

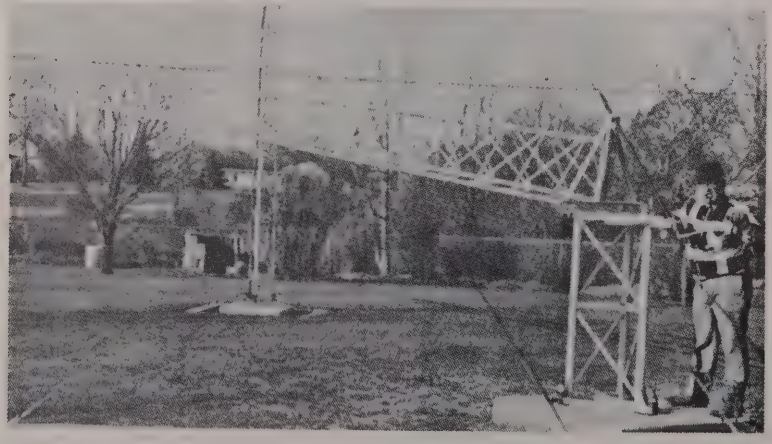
This fully self-supporting base rests on heavy threaded rod imbedded in the same amount of concrete recommended for the equivalent HB-18, HB-22 or HB-26 ground bases. The threaded rods allow the base to be further leveled, if necessary, after the concrete has set and also allows the base and tower to be moved to a different location, if desired, losing only the concrete and rods. The same base can be used for towers starting with the 18", 22" or 26" sections simply by changing the bolted-on base stubbs in the top of the hinged plate. (NOTE: Enough concrete should be used to secure the largest tower that might eventually be mounted on the base).

Using this base, any of the tapered sectional or crank-up towers can be elevated from horizontal to vertical while mounting the full antenna load permitted for the particular tower configuration being used. (NOTE: This base will not mount towers starting with the HAC-26 (heavy 26" section).

Designation	Description	Weight	List Price
SOHB	SCREW OPERATED HINGED BASE specify SOHB-18, SOHB-22 or SOHB-26, depending upon section size at bottom of tower. The 1" x 5' ground rods are set on the same equilateral triangle as the HB-26 (24½" centers).	base 170# rods 40#	$250.00
	Total Weight	210#	

See the other side of this sheet for installation of the Acme screw and associated hardware. Operates same as the FOK except that torque is applied through socket wrench.

Illustrating the ease of bolting on the appropriate section to the base. Note hole positions for mounting three sections sizes.



The base itself is usually the best template for setting the ground rods in concrete. After bolting them to the base, set the base in the excavation so the rods rest on the bottom while the bottom of the base is at grade level. Level after as well as before the concrete is poured.

Fold Over Kits for HEIGHTS ALUMINUM TOWERS

An improved version of the FOLD-OVER-KIT; greater capacity, more adaptable to every Standard Tower configuration.

This FOK can be inserted between any two sections with an 18", 22" or 26" width at their junction point.

The FOK is completely equipped to tilt the tower at the normal folding point of 16 ft.; between the second and third sections. However, towers can also be folded at 24', 32', 40', etc. When folding points above 16' are desired, specify the EXTENSION KIT required for additional height. (designated EK-8' or 24', EK-16' for 32', etc.) NOTE: If the tower configuration contains any HAC-26 (heavy 26" sections) the FOK should be placed at least one section higher than the top HAC-26.

This same FOK can be used between any of the three section sizes by changing the position of the bolted-on base stubbs in the hinged plate. The hinged plate is tilted over by the turning of a large Acme screw, whose torque is transmitted through universals and torque tubes to a handle at convenient hand level off the ground. The Stand-Offs, which hold the torque tubes approx. two feet from the tower, are "U"-bolted to the tower through holes located on 18", 22" and 26" spreads, depending on the section size to which they are bolted. Thus they also can be adapted to larger or smaller towers.

Designation	Description	Wt.	List Price
FOK	FOLD-OVER-KIT specify FOK-18, FOK-22 or FOK-26, depending on sect. size at folding point	125#	$200.00
EK	EXTENSION KIT specify EK-8',EK-16', etc., depending on additional ht. needed. For each 8' add	20#	$ 20.00

Preparing the Tilting Mechanism Remove the top retaining nut from the screw so that it can be inserted through the unthreaded yoke in the bottom "T" of the hinged plate. Then replace the nut on the screw and run it down flush to the unthreaded yoke. When it is adjusted so there is little or no play between it, the unthreaded yoke, the thrust bearing and the bottom retaining nut and the screw still turns freely, the set screw should be permanently tightened. Next insert the screw into the threaded yoke in the top "T" of the hinged plate, and, by turning the screw clockwise, the hinged plate can be closed for placement between any two sections of the tower.

After the universal-connected torque-tubes have been installed in the tower stand-offs the middle of the tower can be lifted as the screw is reversed, thus gradually jacknifing the bottom segment of the tower to an upright position on the base, leaving the tower ready for antenna installation.

HEIGHTS Self-Supporting Aluminum Crank-Up Towers

NO GUY WIRES – NO WALL MOUNTS – NO CLIMBING necessary with Hinged Base

These light-weight, high-tensile aluminum towers can be pushed upright by two or three men or can be hinged upright by one man if mounted on the Screw-Operated Base.

Regular tops take fixed or rotating masts up to 1½" O.D. (larger tops provided on request; specify I.D. required). The Rotator Post or heavy-duty Rotator Shelf is optional at slight extra cost. Towers are completely assembled and pre-strung with rust-proof aircraft cable and winch.

Please deduct 30% from LIST prices shown below.

Crank-Up Tower Designation (indicates extended height & max. antenna wind-load)	Retracted Height	Description of Tower: No. of segments	Description of Tower: Width of segments	Base Size Required (in width)	Tower Weight (assembled for shipment)	LIST PRICE (bases extra; see below.)
CUA28 (5 sq/ft)	18'	2	11 & 14"	14"	90#	$ 240.00
CUA40 (5 sq/ft)	18'	3	11, 14 & 18"	18"	145#	400.00
CUA52 (5 sq/ft)	18'	4	11, 14, 18 & 22"	22"	225#	600.00
CUA64 (5 sq/ft)	18'	5	11, 14, 18, 22 & 26"	26"	320#	900.00
CUA28 (14 sq/ft)	18'	2	14 & 18"	18"	105#	300.00
CUA40 (14 sq/ft)	18'	3	14, 18 & 22"	22"	185#	500.00
CUA52 (14 sq/ft)	18'	4	14, 18, 22 & 26"	26"	295#	800.00
CUA28 (26 sq/ft)	18'	2	18 & 22"	22"	140#	400.00
CUA40 (26 sq/ft)	18'	3	18, 22 & 26"	26"	240#	700.00
CUA28 (40 sq/ft)	18'	2	22 & 26"	26"	185#	540.00
CUA44 (2 sq/ft)	26'	2	11 & 14"	14"	120#	300.00
CUA64 (2 sq/ft)	26'	3	11, 14 & 18"	18"	185#	500.00
CUA84 (2 sq/ft) *	26'	4	11, 14, 18 & 22"	22"	285#	800.00
CUA104 (2 sq/ft) *	26'	5	11, 14, 18, 22 & 26"	26"	415#	1200.00
CUA44 (8 sq/ft)	26'	2	14 & 18"	18"	140#	400.00
CUA64 (8 sq/ft)	26'	3	14, 18 & 22"	22"	245#	700.00
CUA84 (8 sq/ft)	26'	4	14, 18, 22 & 26"	26"	375#	1100.00
CUA44 (14 sq/ft)	26'	2	18 & 22"	22"	190#	600.00
CUA64 (14 sq/ft)	26'	3	18, 22 & 26"	26"	320#	1000.00
CUA44 (26 sq/ft)	26'	2	22 & 26"	26"	250#	800.00
CUA60 (2 sq/ft)	34'	2	14 & 18"	18"	165#	440.00
CUA88 (2 sq/ft) *	34'	3	14, 18 & 22"	22"	305#	800.00
CUA116 (2 sq/ft) *	34'	4	14, 18, 22 & 26"	26"	475#	1300.00
CUA60 (8 sq/ft)	34'	2	18 & 22"	22"	235#	700.00
CUA88 (8 sq/ft)	34'	3	18, 22 & 26"	26"	405#	1200.00
CUA60 (18 sq/ft)	34'	2	22 & 26"	26"	310#	1000.00

(Retracted Height: 18' — ea. segment is 16' long; 26' — ea. segment is 24' long; 34' — ea. segment is 32' long)

* these towers should not be left fully extended in heavy weather unless they are guyed.

HINGED BASES FOR CRANK-UP TOWERS

Designation	Description of Base	Height above ground	Concrete Needed	Weight	LIST PRICE
HB-14 (ASSEM.)	Hinged Base, 14" x 4' (assembled)	6 inches	none (normally)	24#	$ 22.00
HB-18 (ASSEM.)	Hinged Base, 18" x 4' (assembled)	6 inches	1 cu/yd	40#	40.00
HB-22 (ASSEM.)	Hinged Base, 22" x 5' (assembled)	6 inches	2 cu/yds	60#	50.00
HB-26 (ASSEM.)	Hinged Base, 26" x 6' (assembled)	6 inches	4 cu/yds	70#	60.00
SOHB §	Screw-Operated Hinged Base, 5' tall, plus 5' ground rods	5 feet	as needed	210#	250.00

§ Designated SOHB-18, SOHB-22 or SOHB-26, depending on tower selection

★★★ SPECIAL OFFER ★★★

Purchase any Heights Aluminum Tower with a List Price in excess of $300, with No Trade-In; Enclose Payment in Full with your order; Enclose this coupon, and you may take a 1/3 Discount (33-1/3% instead of 30%) from the list price.

AMATEUR ELECTRONIC SUPPLY

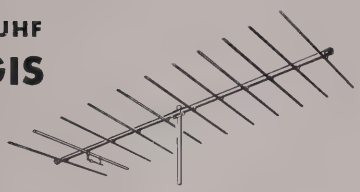
4828 West Fond du Lac Avenue
Milwaukee, Wisconsin 53216
Phone (414) 442-4200

MILWAUKEE STORE HOURS: Mon & Fri - 9 am to 9 pm;
Tues, Wed, Thurs - 9 am to 5:30 pm; Sat - 9 am to 3 pm

Cush Craft

AMATEUR COMMUNICATION ANTENNAS

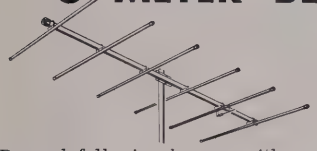
VHF - UHF YAGIS



The standard of comparison in VHF/UHF yagi communications. Booms 1" dia. aluminum tubing, preassembled 3/16" dia. elements. Pretuned Reddi Match, 52 ohm coax feed. Average gain 7 elements 11 db, 11 elements 13 db.

A144-7 - 2 meter, 7 el., 9' boom $11.95
A144-11 - 2 meter, 11 el., 12' boom $14.95
A220-11 - 1 1/4 meter, 11 el., 9.5' boom $11.95
A430-11 - 3/4 meter, 11 el., 5' boom $10.50

6 METER BEAMS



Rugged full size beams with proven performance. They feature high forward gain - front to back ratio and broad frequency response. Aluminum booms, 1 1/4" and 1 1/2" dia.; elements 3/4" with preassembled direct 52 ohm Reddi Match coaxial feed. All parts are marked for easy assembly.

A50-3 - 3 el.: 7.5 db gain; 6' boom $15.95
A50-5 - 5 el.: 9.5 db gain; 12' boom $21.50
A50-6 - 6 el.; 11.5 db gain; 20' boom $34.95
A50-10 - 10 el.; 13 db gain; 24' boom $54.95

COAXIAL STACKING KITS

Stacking doubles effective radiated power, provides 3 db gain over single beam, low radiation angle and greater capture area. Complete with RG-59/U cable and hardware.

Model No.	For Antenna Type	Price
A11-SK	A144-11	$4.95
A17-SK	A144-7	4.95
A21-SK	A220-11	4.95
A41-SK	A430-11	4.95
A53-SK	A50-3	4.95
A55-SK	A50-5	4.95
A56-SK	A50-6	4.95
A51-SK	A50-10	6.95

DELUXE GROUND PLANES

These all aluminum 1/4 wave ground planes are supplied with an easy to use chart for quick adjustment to exact frequency. Coax fitting for direct 52 ohm feed.

DGPA - 27 to 50 mhz $16.00
DGPB - 108 to 175 mhz 14.00

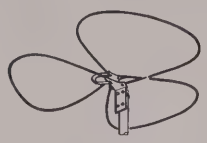
RINGO 3.75 DB GAIN FM REPEATER ANTENNA

- 52 OHM DIRECT COAX FEED
- LOW ANGLE OF RADIATION
- DIRECT DC GROUND
- NO DROOPING RADIALS
- HEIGHT 42" RING DIA. 5"

A full half wave length vertically polarized omnidirectional antenna. Ideal for FM repeater installations.

AR-2 - 135 - 175 mhz $12.50

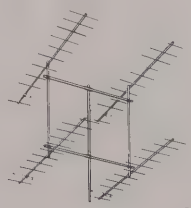
THE BIG WHEEL 360° GAIN



A horizontally polarized omnidirectional gain antenna. Bandwidth 4 mhz with SWR 1.3 - 1 or less; takes 52 ohm cable. Ideal for net control of general ham use. Single Big Wheel gain 1 db, two stacked 4 db, four stacked 7 db. Stacking kits are complete with RG-59/U cable and hardware.

ABW-144 - 2 meter Big Wheel $11.95
ABW-12S - 2 bay stacking kit 3.95
ABW-14S - 4 bay stacking kit 11.75

VHF - UHF QUAD ARRAYS



The ultimate in VHF/UHF yagi arrays. They are complete with four matched yagis for 19 db forward gain, 28 db f/b ratio. Package includes stacking frame, coax harness and all hardware. Direct 52 ohm coax feed.

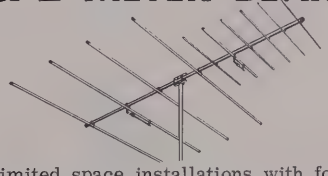
A144-11Q - 2 meter, 44 el., 35 lbs. $99.50
A144-7Q - 2 meter, 28 el., 25 lbs. $87.50
A220-11Q - 1 1/4 meter, 44 el., 22 lbs. $79.50
A430-11Q - 3/4 meter, 44 el., 15 lbs. $67.50

MOBILE HALOS

Horizontally polarized, omnidirectional, machined aluminum construction. Supplied with 9' telescoping mast. Direct 52 ohm Reddi Match feed.

AM-2M - Single 2 meter, 14" dia. $ 9.95
AM-22 - Stacked 2 meter, 38" high 16.95
AM-6M - Single 6 meter, 26" dia. 13.95
AM-26 - 6 & 2 meter dual band 18.95

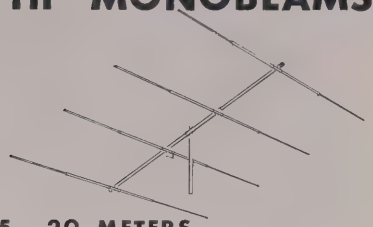
6 & 2 METER BEAM



For limited space installations with four elements on 6 meters, six elements on 2 meters. Uses two separate 52 ohm feed lines to eliminate interaction. Six meter elements are 3/4" O.D., two meter elements 3/16" solid rod preassembled on 1 1/4" boom.

A26-9 - 10 elements, 6 and 2 meter $29.95

HF MONOBEAMS



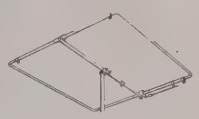
10 - 15 - 20 METERS

Cush Craft Monobeams combine superior electrical and mechanical features with the best quality materials and workmanship. Booms and elements are seamless .058 and .049 wall hard drawn aluminum tubing.

Element lengths and spacings are engineered to provide maximum forward gain, F/B ratio and broadband characteristics. Reddi Match driven element for direct 52 ohm coax feed.

A28-3 - 10 meter, 3 el., 10' boom $31.95
A28-4 - 10 meter, 4 el., 18' boom 42.95
A21-3 - 15 meter, 3 el., 12' boom 39.95
A21-4 - 15 meter, 4 el., 21' boom 59.95
A14-2 - 20 meter, 2 el., 10' boom 49.95
A14-3 - 20 meter, 3 el., 20' boom 77.50

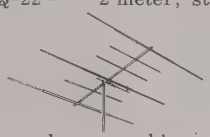
SQUALO MOBILE-BASE



A half wave horizontally polarized, omnidirectional antenna with compact dimensions. Low Q for broad band coverage - direct 52 ohm Reddi Match feed. Excellent for fixed or mobile installations. Rubber suction cups for car top. Six meter includes mast mount boom. Two meter stacked has bumper mount mast.

ASQ-6 - 6 meter, 30" square $13.95
ASQ-2 - 2 meter, 10" square 9.95
ASQ-22 - 2 meter, stacked 16.95

PORTABLE BEAM



Zipper beam combines full size performance and sturdy swing out portability. Perfect for any type portable operation. Measures 4" x 4" x 50" folded, weight 4 lbs.; 5 elements on 2, 9.5 db; 3 elements on 6, 7.5 db gain. Direct 52 ohm Reddi Match feed.

A26-ZP - 6 or 2 meter beam $16.95

"HAM STIK"

An adjustable rotatable dipole for 6, 10, 15 or 20 meters. Stub boom for mast or tower mounting. Feed line 52 or 72 ohm coax.

HS-1 - Maximum lgth. 395", 9 lbs. $23.50

BLITZ BUG

COAXIAL LIGHTNING ARRESTER

Blitz Bug is the original "patented" coaxial lightning arrester. It is a precision engineered electronic component, matched to your equipment. The Exclusive static ring discharge points repel lightning through constant static bleed off.

MODEL LAC-1 $ 3.95

MODEL LAC-2 $ 4.45

NEW DX-ARRAY

Cush Craft

FOR

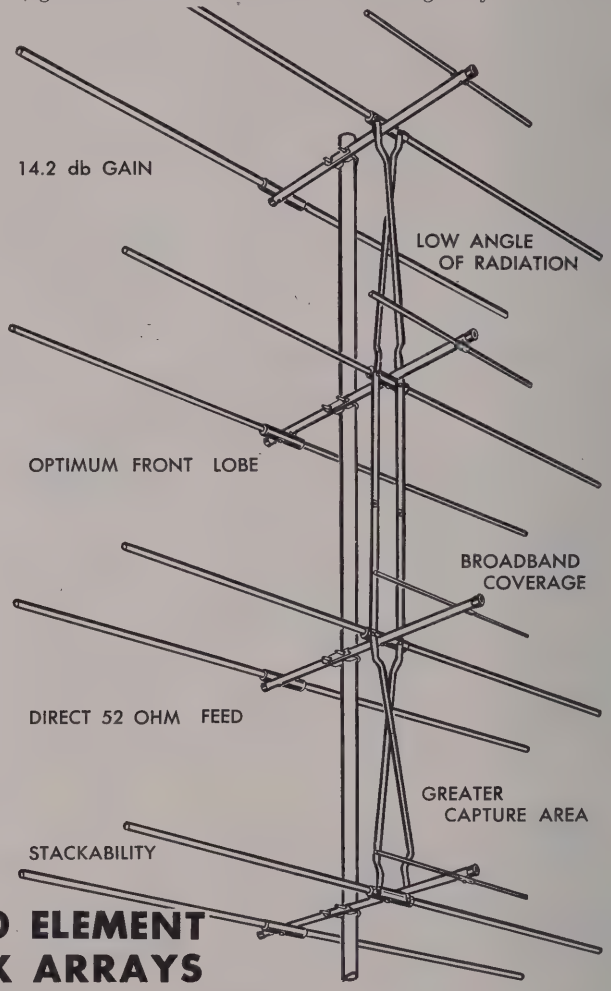
144 mhz 220 mhz 432 mhz

A breakthrough in VHF/UHF Amateur antennas!

The new Cush Craft DX-Arrays combine the best yagi and colinear features into the World's most advanced amateur communication antennas.

Realizing that the antenna is the most important part of your station, Cush Craft engineers have devoted two years of intensive development and testing to perfect DX-Array. DX-Arrays have already established new records in Dx-ing and moonbounce programs.

Whatever your interest may be, ragchewing, contests, DX, or moonbounce, get in on the excitement of VHF hamming today with DX-Array.



20 ELEMENT DX ARRAYS

20 ELEMENT SPECIFICATIONS

Forward Gain* -------- 14.2 db		Impedance --------- 52 ohms	
F/B Ratio ---------- 20 db		VSWR at Frequency --- 1 - 1	
Forward Lobe at 1/2 Pwr. Point		Bandwidth W/VSWR	
horizontal ---------- 48°		Less Than 2 - 1 --- 4 mhz	
vertical ---------- 26°		Power Handling -- 2 KW PEP	
* 1/2 wave reference dipole			
	144 Mhz	220 Mhz	432 Mhz
Hgt. x Width x Depth --	118" x 75" x 30"	78" x 53" x 20"	42" x 29" x 11"
Turning Radius -------	48"	32"	18"
Maximum Mast Dia.*--	1 1/2"	1 1/2"	1 1/2"
Net Weight Lbs. ------	8	7	6

* vertical support mast not supplied

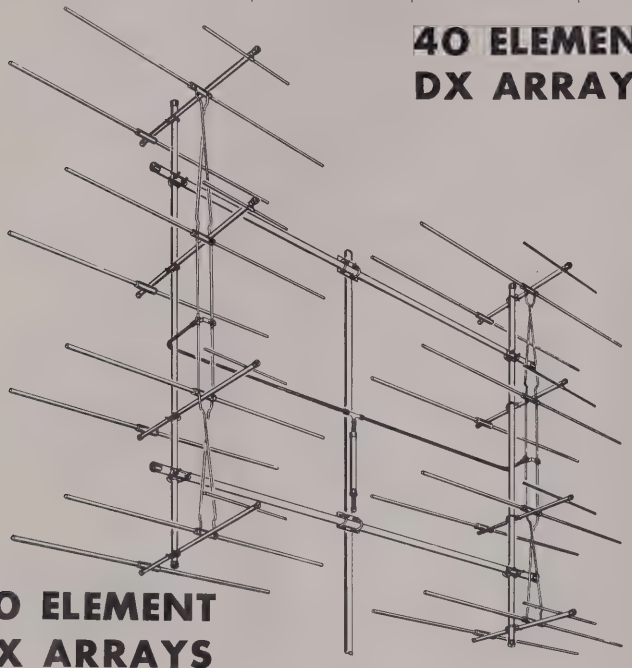
2 METER DX-120 $29.50 net — 1 1/4 METER DX-220 $22.50 net — 3/4 METER DX-420 $17.50 net

Now every amateur can have a full size 17 db gain VHF/UHF phased array. The 40 element arrays combine two 20 element antennas, prefabricated frame, RG-11/U phasing lines, 1-1 balun and all hardware.

You will turn those distant weak signals into regular local contacts with a 40 element DX-Array.

40 ELEMENT SPECIFICATIONS

Forward Gain* ---------- 17 db		Impedance --------- 52 ohms	
F/B Ratio ---------- 20 db		VSWR at Frequency --- 1 - 1	
Forward Lobe at 1/2 Pwr. Point		Bandwidth W/VSWR	
horizontal ---------- 32°		Less Than 2 - 1 --- 4 mhz	
vertical ---------- 26°		Power Handling -- 2 KW PEP	
* 1/2 wave reference dipole			
	144 Mhz	220 Mhz	432 Mhz
Hgt. x Width x Depth -	118" x 192" x 30"	78" x 132" x 20"	42" x 72" x 11"
Turning Radius ------	101"	65"	38"
Maximum Mast Dia. --	2 1/2"	2 1/2"	2 1/2"
Net Weight Lbs.------	32	22	12
Wind Rating ---------	90 mph	90 mph	90 mph
*Stacking Kit Model No.	DXK-140	DXK-240	DXK-440
Amateur Net---------	$ 40.00	$ 38.00	$ 24.00



40 ELEMENT DX ARRAYS

80 ELEMENT DX ARRAYS

The incomparable 80 element DX-Arrays are the world's largest, highest gain ready to assemble VHF/UHF antennas. They combine four 20 element antennas, pre-fabricated stacking frame RG-11/U phasing lines, 1-1 balun and all hardware.

These arrays are designed for the real VHF/UHF enthusiast. With modular construction you can buy the single 20 element array now and add on for 80 elements.

80 ELEMENT SPECIFICATIONS

Forward Gain* ---------- 20 db		Impedance --------- 52 ohms	
F/B Ratio ---------- 20 db		VSWR at Frequency --- 1 - 1	
Forward Lobe at 1/2 Pwr. Point		Bandwidth W/VSWR	
horizontal ---------- 32°		Less Than 2 - 1 4 mhz	
vertical ---------- 12°		Power Handling -- 2 KW PEP	
* 1/2 wave reference dipole			
	144 Mhz	220 Mhz	432 Mhz
Hgt. x Width x Depth -	275" x 192" x 30"	182" x 132" x 20"	97" x 72" x 11"
Turning Radius ------	101"	65"	38"
Maximum Mast Dia. --	2 1/2"	2 1/2"	2 1/2"
Wind Rating ---------	90 mph	90 mph	90 mph
Net Weight Lbs. -----	64	43	24
*Stacking Kit Model No.	DXK-180	DXK-280	DXK-480
Amateur Net --------	$ 80.00	$ 67.00	$ 49.00

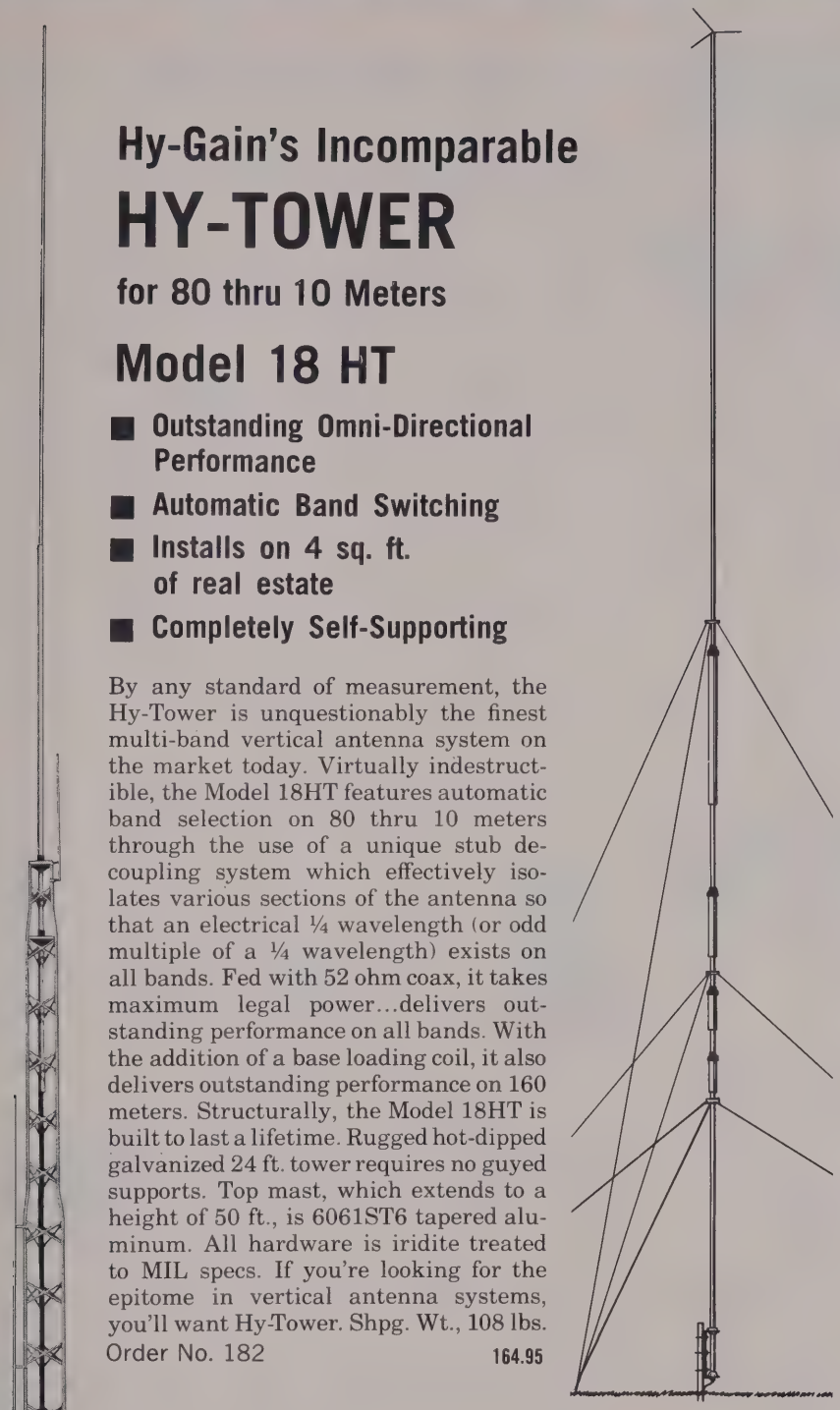
* Prices shown above are for stacking kits only and do not include antennas. i.e. cost of 40 element 2 meter = 2, DX-120 @ $29.50 each, plus 1, DXK-140 @ $40.00 = $99.00

1 to 1 balun for 20 element antennas, specify antenna model No. $6.95

Vertical Polarization bracket, 20 el. antennas DX-VPB $3.00

The Best Signals Today Come from DX-ARRAY

hy-gain MULTI-BAND VERTICALS



Hy-Gain's Incomparable

HY-TOWER

for 80 thru 10 Meters

Model 18 HT

- **Outstanding Omni-Directional Performance**
- **Automatic Band Switching**
- **Installs on 4 sq. ft. of real estate**
- **Completely Self-Supporting**

By any standard of measurement, the Hy-Tower is unquestionably the finest multi-band vertical antenna system on the market today. Virtually indestructible, the Model 18HT features automatic band selection on 80 thru 10 meters through the use of a unique stub decoupling system which effectively isolates various sections of the antenna so that an electrical ¼ wavelength (or odd multiple of a ¼ wavelength) exists on all bands. Fed with 52 ohm coax, it takes maximum legal power...delivers outstanding performance on all bands. With the addition of a base loading coil, it also delivers outstanding performance on 160 meters. Structurally, the Model 18HT is built to last a lifetime. Rugged hot-dipped galvanized 24 ft. tower requires no guyed supports. Top mast, which extends to a height of 50 ft., is 6061ST6 tapered aluminum. All hardware is iridite treated to MIL specs. If you're looking for the epitome in vertical antenna systems, you'll want Hy-Tower. Shpg. Wt., 108 lbs.

Order No. 182 **164.95**

NEW MODEL

18 AVQ

for 10 through 80 Meters

- **An Individually Tuned Hy-Q Trap for Each Band**
- **Takes Full Power**
- **Rugged Total Performance Construction**
- **Easily Installed Using Minimum Space**

Now for the first time...a modestly priced, easily erected all-band vertical that delivers outstanding omni-directional performance on each band...Hy-Gain's Model 18AVQ. It is ruggedly constructed of heavy gauge, taper-swaged aluminum...uses four separately tuned Hy-Q air dielectric traps...each trap factory pre-tuned to provide peaked performance, 80 thru 10 meters. The low angle radiation pattern developed by the 18AVQ insures uncompromised performance for short haul or DX communications. SWR is 2:1 or less on all bands. The 18AVQ is simple to install. Withstands 80 mph winds when properly guyed.

Order No. 238 **67.50**

SPECIFICATIONS

Power Rating	1 kw AM, 2 kw PEP
Feedline Required	52 ohm coax
Minimum Ground Required	8 ft. Ground Rods
Overall Height	32' 2"
Weight	14½ lbs.
Mast Bracket	Double-grip, heavy gauge stamped aluminum – takes mast diameter up to 1⅝"

NEW...

Special hinged base assembly on Model 18HT allows complete assembly of antenna at ground level...permits easy raising and lowering of the antenna.

The Versatile Model 18V for 80 thru 10 Meters

The Model 18V is a low-cost, highly efficient vertical antenna that can be tuned to any band...80 thru 10 meters...by a simple adjustment of the feed point on the matching base inductor. Fed with 52 ohm coax, this 18 ft. radiator is amazingly efficient for DX or local contact. Constructed of heavy gauge aluminum tubing, theModel 18V may be installed on a short 1⅝ inch mast driven into the ground. It is also adaptable to roof or tower mounting. Highly portable, the Model 18V can be quickly knocked down to an overall length of 5 ft. and easily re-assembled for field days and camping trips. Shpg. Wt., 5 lbs.

Order No. 193 **19.95**

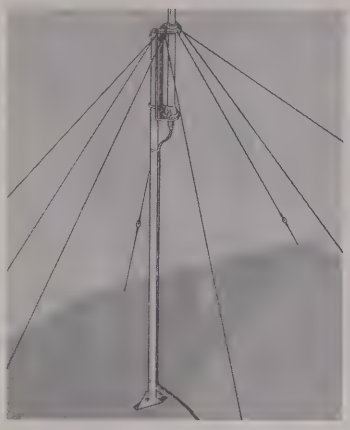
hy-gain MULTI-BAND HY-Q TRAP VERTICALS

New, improved successor to the world's most popular vertical!

Hy-Gain Model 14AVQ for 40 thru 10 Meters

- New "Hy-Q" Traps
- New 12″ Double-Grip Mast Bracket
- Taper Swaged Seamless Aluminum Construction
- Entire Structure at DC Ground for Low Noise Figure & Positive Lighting Protection

The Model 14AVQ...new, improved successor to the world famous Model 14AVS...is a self-supporting, automatic band switching vertical that delivers outstanding omni-directional performance on 40 thru 10 meters. Three separate "Hy-Q" traps featuring large diameter coils that develop an exceptionally favorable L/C ratio and very high Q, provide peak performance by effectively isolating sections of the antenna so that a true ¼ wave resonance exists on all bands. Outstanding low angle radiation pattern makes DX and other long haul contacts easy. Mechanical superiority includes solid aluminum housing for traps using air dielectric capacitor...heavy gauge taper swaged seamless aluminum radiator...full circumference compression clamps at tubing joints that are non-conducive to corrosion and wear...and, a 12″ double-grip mast bracket that insures maximum rigidity whether roof-top or ground mounted. The Model 14AVQ also delivers excellent performance on 80 meters using Hy-Gain Model LC-80Q Loading Coil. Overall height is 18 feet. Shpg. Wt., 10 lbs. Unsurpassed for portability ...outstanding for permanent installations. **35.95** Order No. 385



Roof Mounting Kit

MODEL LC-80Q LOADING COIL—Adapts Model 14AVQ to 80 meter operation
Order No. 391 **12.95**

ROOF MOUNTING KIT—Model 14RMQ provides rugged roof mounting support for Model 14AVQ
Order No. 184 **16.95**

For 10, 15 and 20 Meters
NEW Hy-Gain Model 12AVQ

The Model 12AVQ for 10, 15 and 20 meters is the new companion antenna to the Model 14AVQ. Completely self-supporting, the Model 12AVQ features new "Hy-Q" traps...new 12″ double-grip mast bracket...taper swaged seamless aluminum construction with full circumference compression clamps at tubing joints. It delivers outstanding low angle radiation. SWR is 2:1 or less on all bands. Overall height is 13′6″. Shpg. Wt., 9 lbs. **26.95** Order No. 384

ROOF MOUNTING KIT—Model 12RMQ provides rugged roof mounting support for Model 12AVQ **14.95** Order No. 183

NEW Hy-Q TRAPS

New Hy-Gain Hy-Q Traps embrace unique engineering concepts based on years of research, development and field use dating back to original patents of 1938, held by Hy-Gain. Each trap for each band is an individual assembly that is precision tuned at the factory to operating frequency. No compromise is made for adjustment to peak performance on Phone or CW. Each Hy-Q Trap is precision wound and exactingly spaced on large diameter polystyrene cores to provide an exceptionally favorable L/C ratio and high Q performance. Exclusive capacitor design uses air dielectric with no foreign elements present between the plates of the capacitor. The hazard of significant change in capacitor characteristics due to aging and extreme climatic conditions is thus totally eliminated.

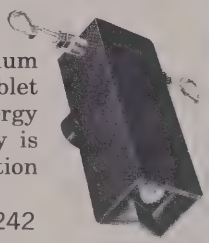
MULTI-BAND HY-Q TRAP DOUBLETS

Hy-Q Traps

- **Install Horizontally or as Inverted V**
- **Super-Strength Aluminum Clad Wire**
- **Weatherproof Center and End Insulators**

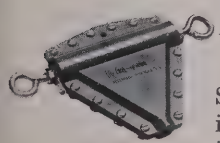
Installed horizontally or as an inverted V, Hy-Gain doublets with Hy-Q traps deliver true half wavelength performance on every design frequency. Matched traps, individually pretuned for each band feature large diameter coils that develop an exceptionally favorable L/C ratio and very high Q performance. Mechanically superior solid aluminum trap housings provide maximum protection and support to the loading coil. Fed with 52 ohm coax, Hy-Gain doublets employ super-strength aluminum clad single strand steel wire elements that defy deterioration from salt water and smoke...will not stretch...withstand hurricane-like winds. SWR less than 1.5:1 on all bands. Strong, lightweight, weatherproof center insulators are molded from high impact cycolac. Hardware is iridate treated to MIL specs. Heavily serrated 7-inch end insulators molded from high impact cycolac increase leakage path to approximately 12 inches.

BROAD BAND DOUBLET BALUN for 10 thru 80 Meters Model BN-86



The model BN-86 balun provides optimum balance of power to both sides of any doublet and vastly improves the transfer of energy from feedline to antenna. Power capacity is 1 KW DC. Features weatherproof construction and built-in mounting brackets.

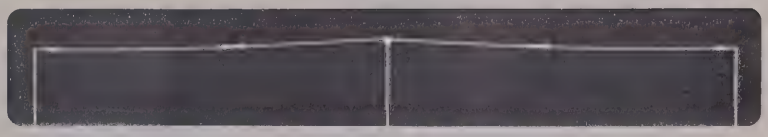
Shpg. Wt. 1 lb. **14.95** Order No. 242



CENTER INSULATOR for Multi-Band Doublets Model CI

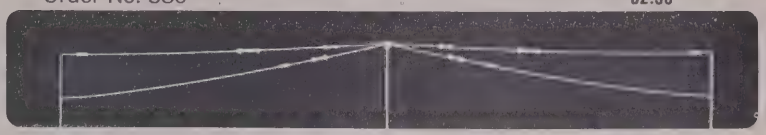
Strong, lightweight, weatherproof Model CI is molded from high impact cycolac. Hardware is iridite treated to MIL specs. Accepts ¼" or ⅜" coaxial cable. Shpg. Wt., 2 lbs.

Order No. 155 **4.95**



MODEL 2BDQ for 40 and 80 meters. 100' 10½" overall. Takes maximum legal power. Shpg. Wt., 4 lbs.

Order No. 380 **32.50**



MODEL 5BDQ for 10, 15, 20, 40 and 80 meters. 94' overall. Takes maximum legal power. Shpg. Wt., 7 lbs.

Order No. 383 **46.50**

Hy-Gain SINGLE BAND DOUBLET Model HD-4

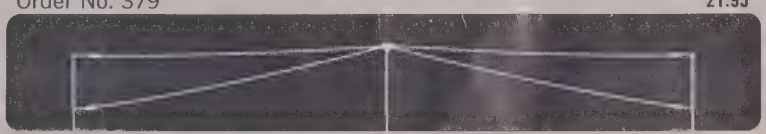
High performance single band doublet installs horizontally or as inverted V. Takes 500 watts P.E.P. Supplied with cutting instructions for 10, 15, 20, 40 or 80 meter operation. Complete with miniature center and end insulators, 50' RG58/U and necessary copper clad stranded steel wire.

Order No. 214 **9.95**

Hy-Q TRAP DOUBLET KIT for 40 and 80 Meters Model 2TDQ

The Model 2TDQ is a perfectly matched set of precision tuned Hy-Q traps for constructing a 40 and 80 meter trap doublet. Takes maximum legal power. Shpg. Wt., 2 lbs.

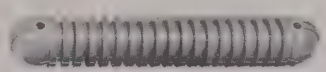
Order No. 379 **21.95**



Hy-Gain TRAPLESS FAN DOUBLET for 15, 40 and 80 Meters Model 2BDP

A trapless fan doublet for 15, 40 and 80 meters featuring Hy-Gain's superbly constructed center and end insulators with super-strength aluminum clad single strand wire elements. Delivers outstanding performance on unlimited power. Shpg. Wt., 4 lbs.

Order No. 322 **21.95**



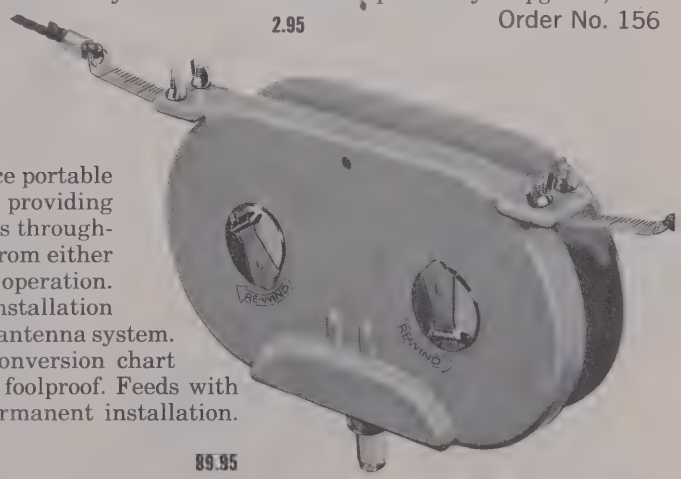
END INSULATORS for Multi-Band Doublets Model EI

Rugged 7-inch end insulators are molded from high impact cycolac that is heavily serrated to increase leakage path to approximately 12 inches. Available in pairs only. Shpg. Wt., 1 lb.

2.95 Order No. 156

Hy-Gain REEL TAPE PORTABLE DIPOLE for 10 thru 80 Meters Model 18TD

The most portable high performance dipole ever...



The Model 18TD is unquestionably the most foolproof high performance portable doublet antenna system ever developed. It has proven invaluable in providing reliable communications in vital military and commercial-applications throughout the world. Two stainless steel tapes, calibrated in meters, extend from either side of the main housing up to a total distance of 132 feet for 3.5 mc operation. 25 ft. lengths of polypropylene rope attached to each tape permits installation to poles, trees, buildings...whatever is available for forming a doublet antenna system. Integrated in the high impact housing is a frequency to length conversion chart calibrated to meter measurements on the tapes...makes installation foolproof. Feeds with 52 ohm coax. Delivers outstanding performance as a portable or permanent installation. Measures 10x5½x2 inches retracted. Shpg. Wt., 8 lbs.

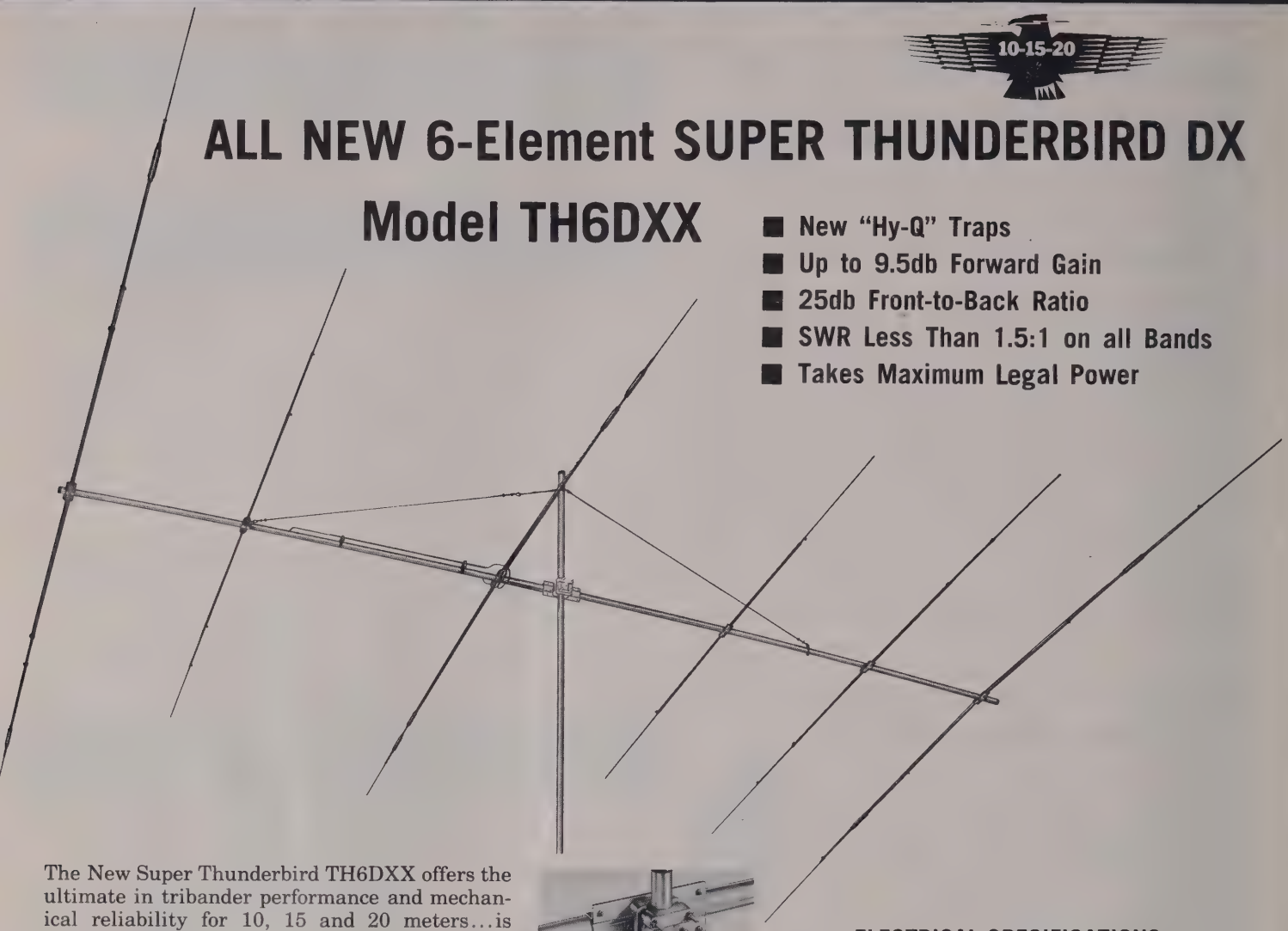
Order No. 228 **89.95**

10-15-20

ALL NEW 6-Element SUPER THUNDERBIRD DX

Model TH6DXX

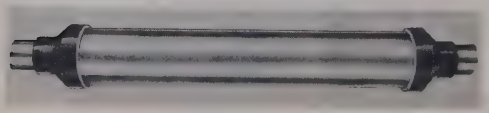
- New "Hy-Q" Traps
- Up to 9.5db Forward Gain
- 25db Front-to-Back Ratio
- SWR Less Than 1.5:1 on all Bands
- Takes Maximum Legal Power

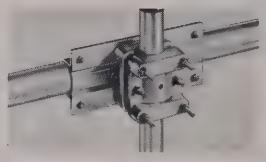


The New Super Thunderbird TH6DXX offers the ultimate in tribander performance and mechanical reliability for 10, 15 and 20 meters...is superb on DX and other long haul contacts. Separate Hy-Q traps, featuring large diameter coils that develop an exceptionally favorable L/C ratio and very high Q, provide peak performance on each band whether working phone or CW. Exclusive Hy-Gain Beta Match, factory pre-tuned, insures maximum gain and F/B ratio without compromise. Feeds with 52 ohm coaxial cable...SWR less than 1.5:1 on all bands. Mechanically superior construction features taper swaged, slotted tubing—allows easy adjustment and readjustment. Taper swaged tubing permits larger diameter where it counts! And, less wind loading. Full circumference compression clamps are mechanically and electrically superior to self-tapping sheet metal screws. Large diameter, heavy gauge aluminum boom...heavy cast aluminum boom to mast clamp and heavy gauge machine formed element to boom brackets. A totally new dimension in Tri-Bander performance.

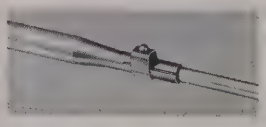
Order No. 389 **$164.95**

New, Improved "Hy-Q" traps...separate traps for each band.





Tilt-head, universal boom-to-mast bracket—all new, cast aluminum bracket accommodates masts from 1¼" x 2½". Allows easy tilting for installation, maintenance and tuning, provides mast feed-thru for beam stacking.



Taper swaged, slotted tubing—new tubing on all elements allows easy adjustment and re-adjustment. Taper swaged to permit larger diameter tubing where it counts! And, less wind loading. Full circumference compression clamps are mech. and elec. superior to self-tapping sheet metal screws.

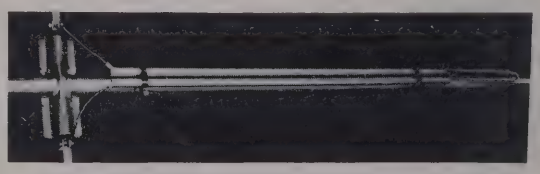
Extra heavy gauge, machine formed **element-to-boom brackets**, with plastic sleeves used only for insulation. Bracket design allows full mechanical support.

ELECTRICAL SPECIFICATIONS

Frequency Range	20, 15 and 10 Meters
Gain	8.7db (average)
Front-to-Back Ratio	25db
Maximum Power Input	1 kw AM; 2 kw P.E.P.
VSWR (at resonance)	1.5:1
Impedance	50 ohms

MECHANICAL SPECIFICATIONS

Longest Element	31.1 ft.
Boom Length	24 ft.
Turning Radius	20 ft.
Wind Load at 80 MPH	157 lbs.
Maximum Wind Survival	100 MPH
Net Weight	47 lbs.
Mast Diameter	1¼" to 2½"
Boom Diameter	2 "



Hy-Gain Beta Match—Advanced design from company that invented the Beta Match. Tapered impedance provides most efficient 3 band matching. Provides DC ground to eliminate precipitation static.

NEW, IMPROVED SUPER 3-Element THUNDERBIRD Model TH3Mk3

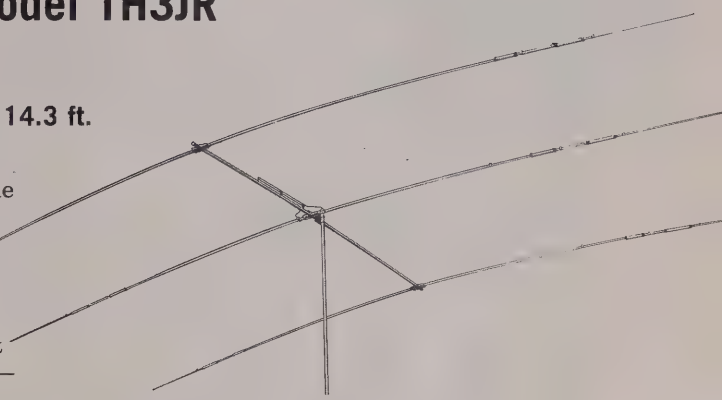
■ New "Hy-Q" Traps ■ Up to 8db Forward Gain ■ 25db Front-to-Back Ratio ■ Takes Maximum Legal Power

Delivers outstanding performance on 10, 15 and 20 meters. Separate and matched "Hy-Q" Traps for each band. Feeds with 52 ohm coax. Hy-Gain Beta Match presents tapered impedance which provides most efficient 3 band matching and provides DC ground to eliminate precipitation static resulting in maximum F/B ratio, SWR less than 2:1 at resonance on all bands. Mechanically superior construction features taper swaged slotted tubing allowing easy adjustment and permitting larger diameter where it counts. Has heavy tiltable boom to mast clamp.

132.95 Order No. 388

FABULOUS THUNDERBIRD JUNIOR Model TH3JR

■ Up to 8db Forward Gain ■ 25db Front-to-Back Ratio
■ Takes up to 300 Watts AM; 600 Watts P.E.P.
■ Rotates with Heavy Duty TV Rotator ■ Turning Radius 14.3 ft.

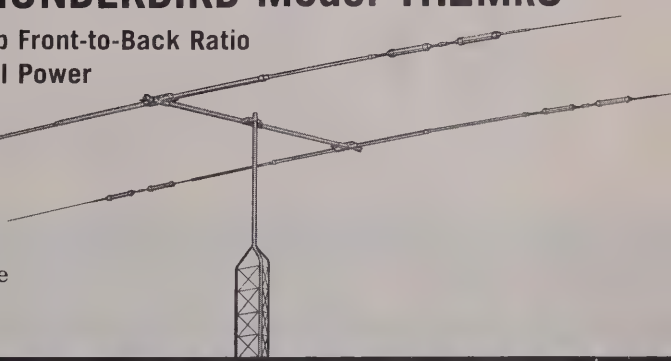


If you're looking for top performance on 10, 15 and 20 meters but are hampered with severe space limitations, you'll want the Model TH3JR. Constructed of durable, lightweight taper-swaged aluminum tubing, the Model TH3JR is ideal for rooftop or lightweight tower installations. Separate and matched "Hy-Q" traps for each band. Feeds with 52 ohm coax—Beta Matched for optimum gain, maximum F/B ratio without compromise. SWR less than 2:1 at resonance on all bands. Molded high impact cycolac insulators—all hardware iridite treated to MIL specs.

Order No. 221 89.95

NEW, IMPROVED SUPER 2-Element THUNDERBIRD Model TH2Mk3

■ New "Hy-Q" Traps ■ Up to 5db Forward Gain ■ 15-20db Front-to-Back Ratio
■ Rotates with Standard TV Rotator ■ Takes Maximum Legal Power



A ruggedly constructed compact Tribander for 10, 15 and 20 meters that installs most anywhere...delivers excellent performance. Features new Hy-Q traps. Feeds with 52 ohm coax—Beta Matched for maximum gain and F/B ratio without compromise. SWR less than 2:1 at resonance on all bands. Heavy cast aluminum tiltable boom-to-mast clamp and taper swaged slotted tubing make this the most rugged available.

Order No. 390 $ 86.95

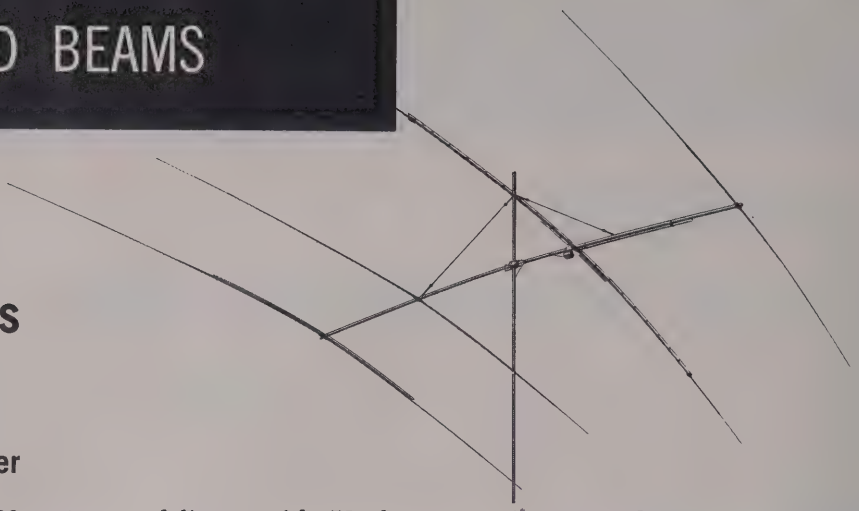
SPECIFICATIONS

ELECTRICAL	Model TH3Mk3	Model TH3JR	Model TH2Mk3
Gain	8db	8db	5.5db
Front-to-Back Ratio	25db	25db	15-20db
Maximum Power Input	1 KW, AM	300 Watts AM; 600 Watts PEP	1 KW, AM
VSWR (at resonance)	Less than 2:1	Less than 2:1	Less than 2:1
Impedance	52 ohms	52 ohms	52 ohms
MECHANICAL			
Longest Element	27 ft.	24.2 ft.	27.3 ft.
Boom Length	14 ft.	12 ft.	6 ft.
Turning Radius	15.7 ft.	14.3 ft.	14.3 ft.
Wind Load At 80 MPH	103 lbs.	85 lbs.	94 lbs.
Maximum Wind Survival	100 MPH	80 MPH	100 MPH
Net Weight	36 lbs.	21 lbs.	23 lbs.
Mast Diameter	1¼" to 2½"	1¼ to 1⅝"	1¼" to 2½"

TRIBANDER BALUN Model BN-86

See complete specifications on page 19

hy-gain DUOBAND BEAMS



Model DB-24B for 20 & 40 Meters

- 8.1db Gain on 20 Meters
- 4.9db Gain on 40 Meters
- Takes Maximum Legal Power

Uses three full-sized elements on 20 meters to deliver 8.1db forward gain and 20 to 30db F/B ratio. On 40 meters, two elements are used in conjunction with Hy-Gain's perfected linear loading which extends parallel along the elements and delivers optimum performance for elements reduced to 2/3 normal size. Unique linear decoupling stubs make two band operation possible without the use of inductance and capacity traps. Forward gain on 40 meters is 4.9db. F/B ratio on 40 meters is 10 to 20db. Antenna feeds with 52 ohm coax...is equipped with balun and Beta Match for optimum transfer of energy. Uses seamless, taper swaged aluminum tube for maximum strength and low wind resistance. Slotted tubing ends and full circumference compression clamps provide superior electrical and mechanical connection. Boom length is 24 ft. longest element, 43 ft. Wind load at 80 MPH, 190 lbs. Maximum power input, 1 kw, AM. Mast diameters from 1¼" to 2½". Shpg. Wt., 64 lbs.

Order No. 396 **189.95**

Model DB10-15A for 10 & 15 Meters

- 8.4db Gain on 15 Meters
- 8.3db Gain on 10 Meters
- Takes Maximum Legal Power

The perfect answer for maximum 10 and 15 meter performance on both Stateside and DX contacts. Equipped with exclusive Hy-Gain Hy-Q traps, it delivers uncompromised full-size performance on both 10 and 15 meters. F/B ratio on both bands is 15 to 25db...SWR is less than 2:1 at resonance. Feeds with 52 ohm coax...is Beta Matched for optimum gain. Same rugged construction features as DB-24B above. Adapts to easy installation in minimum space...on rooftop or lightweight tower. Heavy gauge 13′ boom; longest element, 23′; turning radius, 13.5′. Wind load at 80 MPH, 98 lbs. Maximum power input, 1 kw, AM. Mast diameters from 1¼" to 2½". Shpg. Wt., 32 lbs.

Order No. 330 **89.95**

hy-gain MONOBAND BEAMS

DX on 40 Meters? It's yours with Hy-Gain's Model 402BA

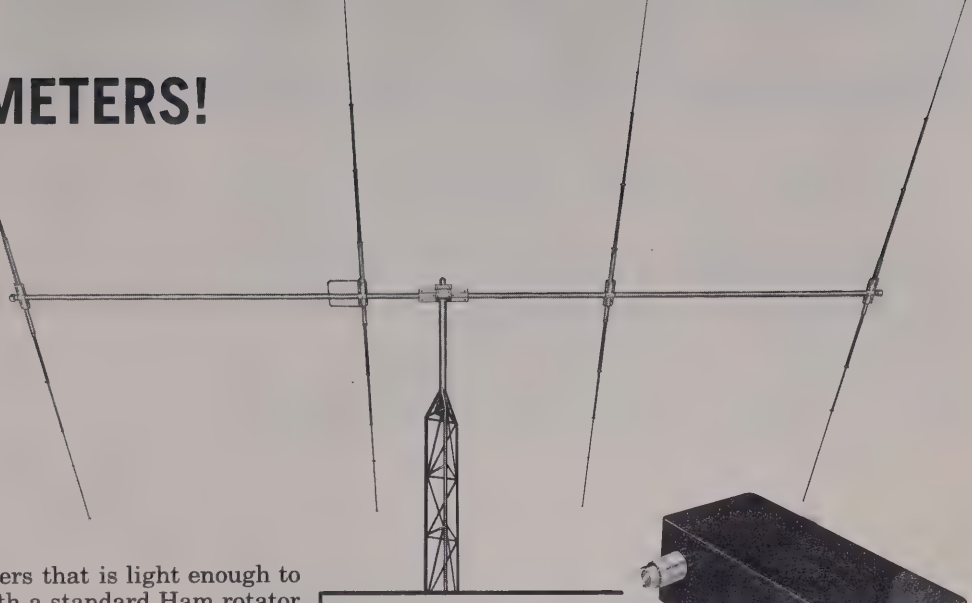
You can work signals on 40 meters that you never knew existed. And, you can work them 24 hours a day, 365 days of the year. The Model 402BA attenuates unwanted signals off the side and back at 12 to 25db while amplifying signals from the front for a minimum of 4.9db forward gain. Unique linear loading stub extending parallel along elements delivers the maximum performance possible from a shortened antenna...without the need for lossey center loading coils. Feeds with 52 ohm coax...Beta Matched for optimum gain. Uses seamless taper swaged aluminum tube for maximum strength and low wind resistance. Slotted tubing ends and full circumference compression clamps provide superior electrical and mechanical connection. Easily stacks with any tribander or 20 meter beam with a scant 10′ separation required. Heavy gauge 16′ boom; 43′ elements. Wind load at 80 MPH, 75 lbs. Maximum power input, 1 kw, AM. Mast diameters from 1¼" to 2½". Shpg. Wt., 40 lbs.

Order No. 397 **142.95**

A TIGER ON 20 METERS!

Hy-Gain's Model 204BA

- 9.2db Forward Gain
- Up to 25db Front-to-Back Ratio
- SWR less than 1.5:1



A high performance DX beam for 20 meters that is light enough to mount on a lightweight tower...rotate with a standard Ham rotator ...yet rugged enough to insure maximum mechanical and electrical reliability. Four full spaced elements on 26′ boom...feeds with 52 ohm coax...Beta Matched for optimum gain. Mechanically and electrically superior construction features taper swaged slotted tubing. Allows easy adjustment and re-adjustment. Tiltable cast aluminum boom-to-mast clamp and heavy gauge machine formed element-to-boom brackets. 2″ OD boom is 26′ long; longest element, 36′6″. Wind load at 80 MPH, 100 lbs. Maximum power input, 1 kw, AM. Mast diameters from 1¼″ to 2½″. Shpg. Wt., 55 lbs. Order No. 394

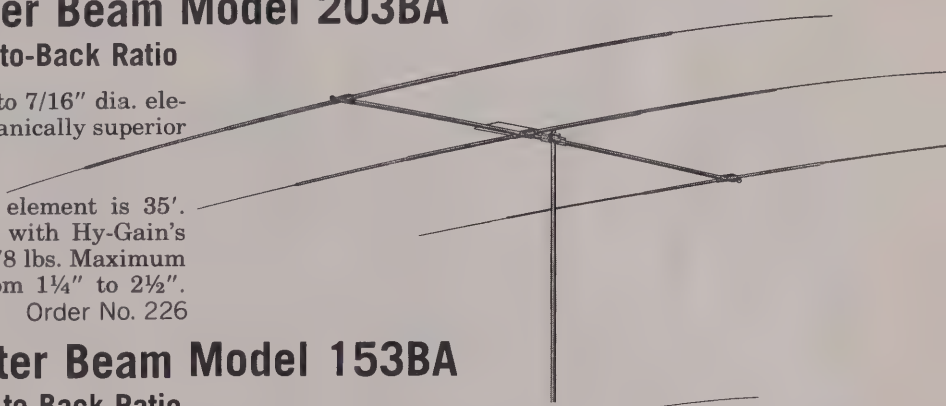
134.95

Hy-Gain FERRITE BALUN Model BN-86

For all Duo-Banders and Mono-Band Beams.
(See page 19 for details)

Hy-Gain 3-Element 20 Meter Beam Model 203BA

- 8.5db Forward Gain
- 25db Front-to-Back Ratio



A full sized 20 meter mono-bander with 1¼″ to 7/16″ dia. elements full spaced on a 2″ dia. 16′ boom. Mechanically superior construction features taper swaged slotted tubing—allows easy adjustment and re-adjustment—tiltable boom-to-mast clamp. Longest element is 35′. Feeds with 52 ohm coax...factory pre-tuned with Hy-Gain's exclusive Beta Match. Wind load at 80 MPH, 78 lbs. Maximum power input, 1 kw, AM. Mast diameters from 1¼″ to 2½″. Shpg. Wt., 35 lbs. 104.95 Order No. 226

Hy-Gain 3-Element 15 Meter Beam Model 153BA

- 8.5db Forward Gain
- 25db Front-to-Back Ratio

A full sized 15 meter mono-bander with ⅞″ to 7/16″ dia. elements 23′ long full spaced on a 2″ dia. 12′ boom. Mechanically superior construction features taper swaged slotted tubing—allows easy adjustment and re-adjustment—tiltable boom-to-mast clamp. Feeds with 52 ohm coax. Easily installed and rotated with heavy duty TV rotator, factory pre-tuned with Hy-Gain's exclusive Beta Match. Wind load at 80 MPH, 71 lbs. Maximum power input, 1 kw, AM. Mast diameters from 1¼″ to 2½″. Shpg. Wt., 20 lbs. 59.95 Order No. 236

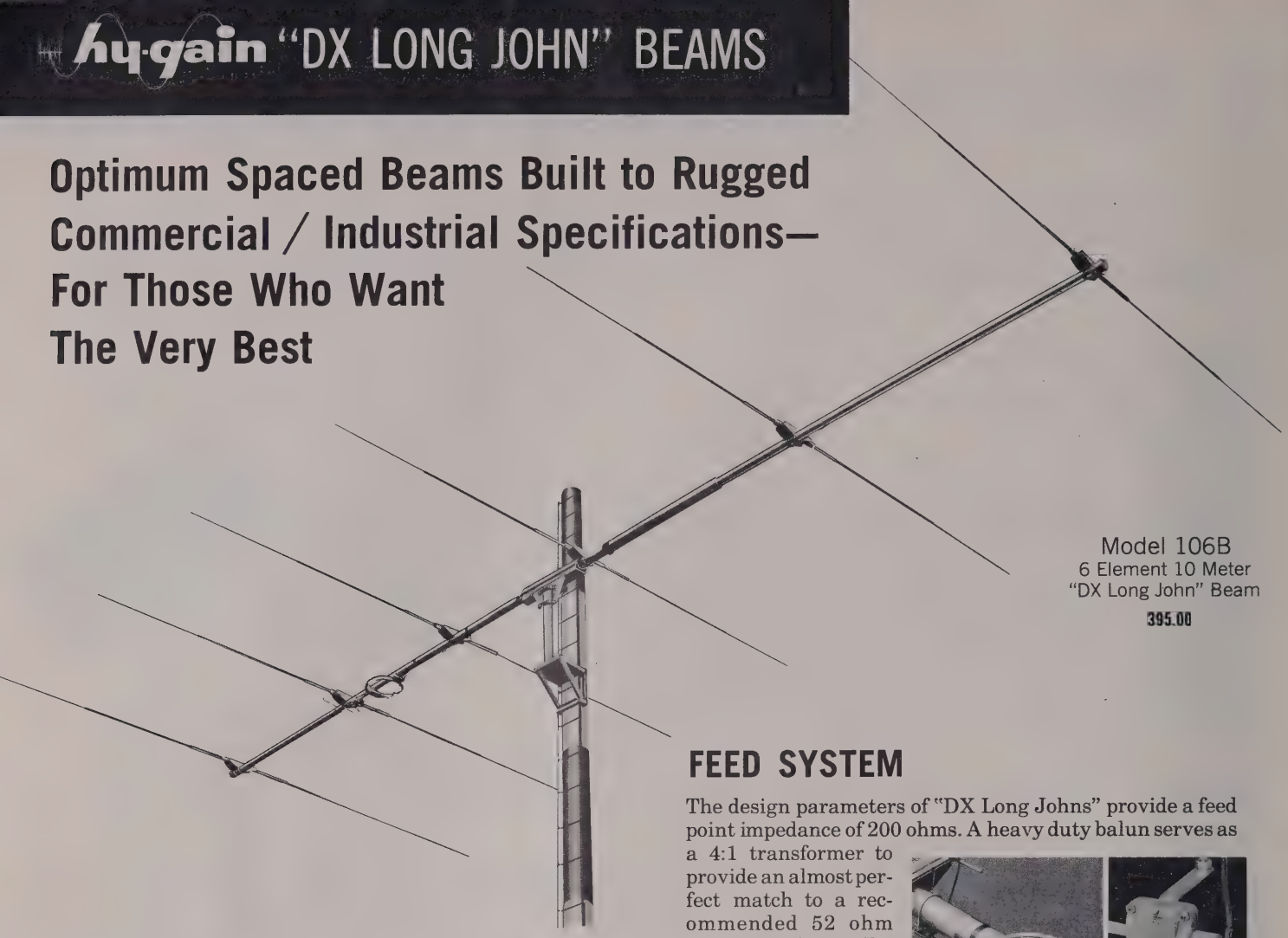
Hy-Gain 3-Element 10 Meter Beam Model 103BA

- 8.5db Forward Gain
- 25db Front-to-Back Ratio

A full sized 10 meter mono-bander with ⅞″ to 7/16″ dia. elements 17′ long full spaced on an 8′, 2″ dia. boom. Easily installed and rotated with a TV rotator. Mechanically superior construction features taper swaged slotted tubing—allows easy adjustment and re-adjustment. Feeds with 52 ohm coax...factory pre-tuned with Hy-Gain's exclusive Beta Match. Wind load at 80 MPH, 40 lbs. Maximum power input 1, kw, AM. Mast diameter 1⅝″. Shpg. Wt., 15 lbs. 47.95 Order No. 239

hy-gain "DX LONG JOHN" BEAMS

Optimum Spaced Beams Built to Rugged Commercial / Industrial Specifications— For Those Who Want The Very Best



Model 106B
6 Element 10 Meter
"DX Long John" Beam
395.00

Hy-Gain "DX Long John" high frequency beams are optimum spaced parasitic arrays that are designed to deliver the maximum theoretical performance attainable on the Amateur Bands. Conceived from adaptations made to commercial antennas produced by Hy-Gain, DX Long Johns are built to rigid commercial specifications using only the finest quality aluminum and stainless steel materials available. Each model is equipped with Hy-Gain's exclusive Beta Match and a super-power balun to insure optimum transfer of electrical energy with minimum SWR. If you're looking for unparalleled performance blending engineering excellence with skilled craftsmanship, you'll want a "DX Long John."

ELECTRICAL CHARACTERISTICS

Outstanding forward gain and directivity is attained with "DX Long Johns" by combining the characteristics of optimum spaced elements with scientific tuning of the parasitic elements and providing a maximum transfer of electrical energy through Hy-Gain's exclusive Beta Match and a highly efficient balun. Each parasitic element is experimentally tuned for length and spacing to achieve a phase relationship that makes a maximum contribution to pattern control. Half power beam width measurements in the E and H planes equate to maximum theoretical forward gain with optimum front-to-back and front-to-side ratios. The feedline and supporting structue of DX Long Johns are effectively isolated from the antenna. This feature, combined with the optimum transfer of energy accomplished by the Beta Match and balun, eliminates pattern distortion and spurious side and back lobes to insure an extremely clean pattern.

FEED SYSTEM

The design parameters of "DX Long Johns" provide a feed point impedance of 200 ohms. A heavy duty balun serves as a 4:1 transformer to provide an almost perfect match to a recommended 52 ohm coaxial feedline. The aluminum sheathed balun terminates into a permanently sealed cast aluminum terminal block as pictured in Figures 1 and 1A.

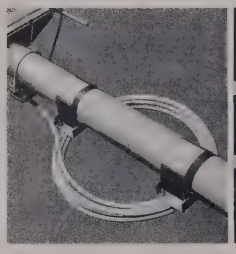


Figure 1

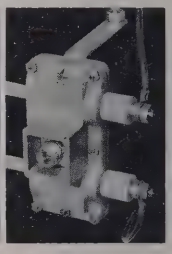


Figure 1A

Exclusive Beta Match (shown in Figure 2) provides the precise amount of inductive reactance to the characteristic capacitive reactance of a half-wave center fed element to achieve the resistive impedance required to insure an optimum transfer of electrical energy with minimum SWR. Although factory pre-tuned, the efficient and reliable Beta Match may be adjusted where installation conditions result in an impedance change.

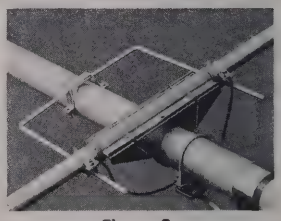
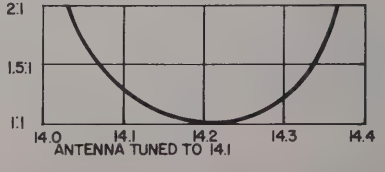


Figure 2

The highly efficient feed system on "DX Long Johns" result in extremely low VSWR and excellent broad band characteristics as shown in Figure 3. "DX Long Johns" can be assembled to favor either the low or the high end of the band while still covering the entire band with acceptable SWR and delivering outstanding gain and directivity.

Figure 3
Typical VSWR Curve for 204B



MECHANICAL CONSTRUCTION

Driven Element to Boom Assembly

The massive driven element to boom fitting shown in Figure 4 is formed from heavy gauge steel which is cadmium plated and then multi-color iridite treated for maximum resistance to salt spray and other corrosive agents. Rugged double grip clamp provides rugged non-slip support keeping captive injection molded insulators under compression...never under tension.

Parasitic Element to Boom Assembly

Rugged double grip boom clamp and massive element clamp assemblies (Figure 5) provide reliable electrical conductivity and insure against the assembly slipping or twisting on the boom.

Tilt-Head Boom to Mast Bracket

Unique tilt-head assemby is fabricated from heavy gauge solid aluminum plate which is light enough to allow one-man installation of the supporting structure. As shown in Figure 6, the all-aluminum boom, when mounted on the mast bracket, can be tilted in either direction to permit easy installation of the parasitic elements. Clamps for the mast are serrated steel blocks that apply a vise-like grip when tightened into position.

Hardware and Fasteners

All hardware and fasteners are of the finest quality stainless steel.

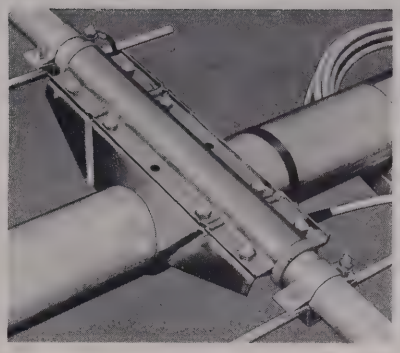


Figure 4

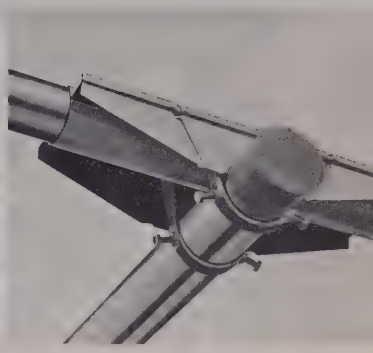


Figure 5

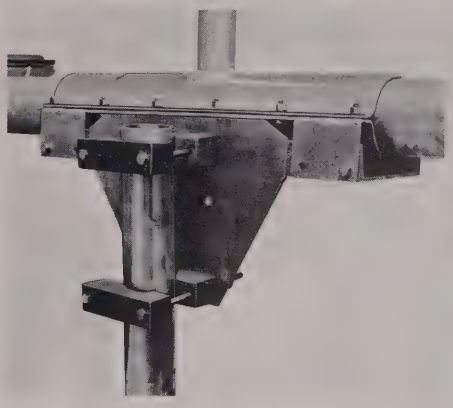


Figure 6

SPECIFICATION SUMMARY

	Model 204B 4-Element 20 Meter	Model 205B 5-Element 20 Meter	Model 403B 3-Element 40 Meter	Model 106B 6-Element 10 Meter	Model 155B 5-Element 15 Meter
ELECTRICAL					
Forward Gain	10.33 db	13.45db	9.45db	14.5db	13.45db
Front-to-Back Ratio (Average)	23.00 db	28.00db	25.00db	22db	20db
Front-to-Side Ratio (Average)	40.00 db	40.00db	35.00db	30db	30db
Maximum Power (RF)	5 KW	5 KW	5KW	5 KW	5 KW
VSWR (at resonance)	1.2:1 Max.	1.2:1 Max.	1.2:1 Max.	1.2:1 Max.	1.2:1 Max.
Feedpoint Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Half-Power Beam Width (E Plane)	53	48	59	42	47.5
Half-Power Beam Width (H Plane)	72	64	79.5	54	60
Frequency Range (Megacycles)	14 to 14.35	14 to 14.35	7 to 7.3	28.0 to 29.7	21.0 to 21.150
Approx. Bandwidth at Resonance (2:1 SWR)	325 KC	370 KC	225 KC	600 KC	600 KC
Polarization	Horiz.	Horiz.	Horiz.	Horiz.	Horiz.
MECHANICAL					
Longest Element	38 ft.	38 ft.	73.5 ft.	18 ft.	24'8"
Element Diameter (Largest)	1½ in.	1½ in.	2½ in.	1½ in.	1½ in.
Boom Length	31 ft.	46 ft.	46 ft.	32 ft.	31'10"
Boom Diameter (Largest)	4½ in.	4 in.	4 in.	3¼ in.	3½ in.
Turning Radius	24.1 ft.	29.7 ft.	42.2 ft.	17.6 ft.	20.3 ft.
Maximum Wind Survival (No ice)	125 MPH	125 MPH	125 MPH	125 MPH	125 MPH
Wind Load (100 MPH)	360 lbs.	555 lbs.	720 lbs.	224 lbs.	274 lbs.
Total Wind Surface Area (Square Feet)	12.8	18.1	23.6	5.6	6.9
Net Weight (Assembled)	116 lbs.	185 lbs.	250 lbs.	151 lbs.	151 lbs.
Total Number of Elements	4	5	3	6	5
Shipping Weight	160 lbs.	250 lbs.	300 lbs.	167 lbs.	167 lbs.
Shipping Volume (Packaged BCP)	8.9 cu. ft.	12.5 cu. ft.	21.9 cu. ft.	7.8 cu. ft.	7.8 cu. ft.
Shipping Cartons	3	3	4	2	2
Order No.	354	355	356	373	375
	395.00	**595.00**	**1150.00**	**395.00**	**395.00**

For recommended rotators and supporting structures, see Hy-Gain Technical Data Reports on Model RP75 rotating steel pole and Model R3501 rotator.

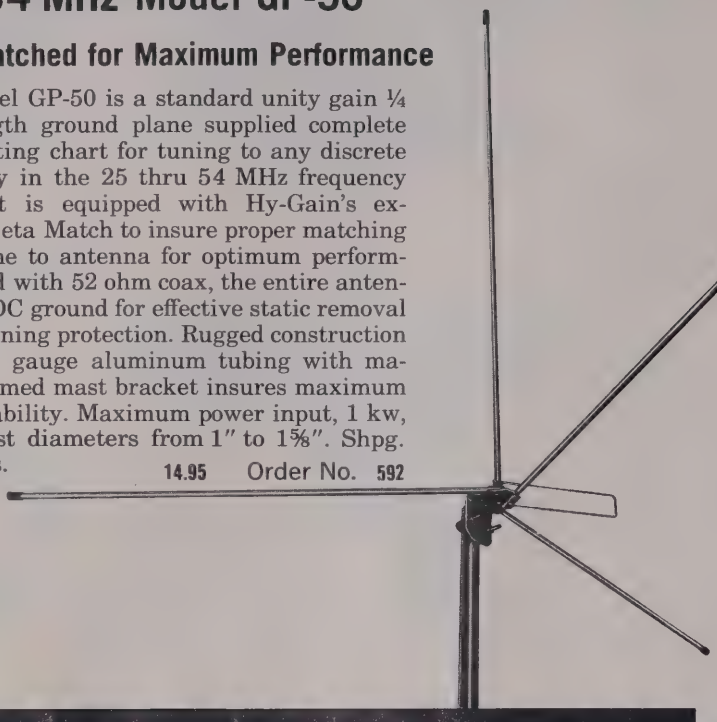
hy-gain GROUND PLANES

Hy-Gain STANDARD GROUND PLANE for 25 thru 54 MHz Model GP-50

Beta Matched for Maximum Performance

The Model GP-50 is a standard unity gain ¼ wavelength ground plane supplied complete with cutting chart for tuning to any discrete frequency in the 25 thru 54 MHz frequency range. It is equipped with Hy-Gain's exclusive Beta Match to insure proper matching of feedline to antenna for optimum performance. Fed with 52 ohm coax, the entire antenna is at DC ground for effective static removal and lightning protection. Rugged construction of heavy gauge aluminum tubing with machine formed mast bracket insures maximum weatherability. Maximum power input, 1 kw, AM. Mast diameters from 1" to 1⅝". Shpg. Wt., 3 lbs.

14.95 Order No. **592**



Hy-Gain STANDARD GROUND PLANE for 108 thru 450 MHz Model SGP-2

Beta Matched for Optimum Performance

The Model SGP-2 is a ruggedly constructed unity gain ¼ wavelength ground plane supplied complete with cutting chart for tuning to any discrete frequency in the 108 thru 450 MHz frequency range. Hy-Gain's exclusive Beta Match provides proper matching of feedline to antenna for optimum performance. Fed with 52 ohm coax, the entire antenna is at DC ground for effective static removal and lightning protection. Heavy gauge seamless aluminum construction with rugged machine formed mast bracket insure lasting durability. Takes maximum legal power. Mast diameter, 1" to 1⅝" OD.

7.95 Order No. **596**

GAIN GROUND PLANES for VHF

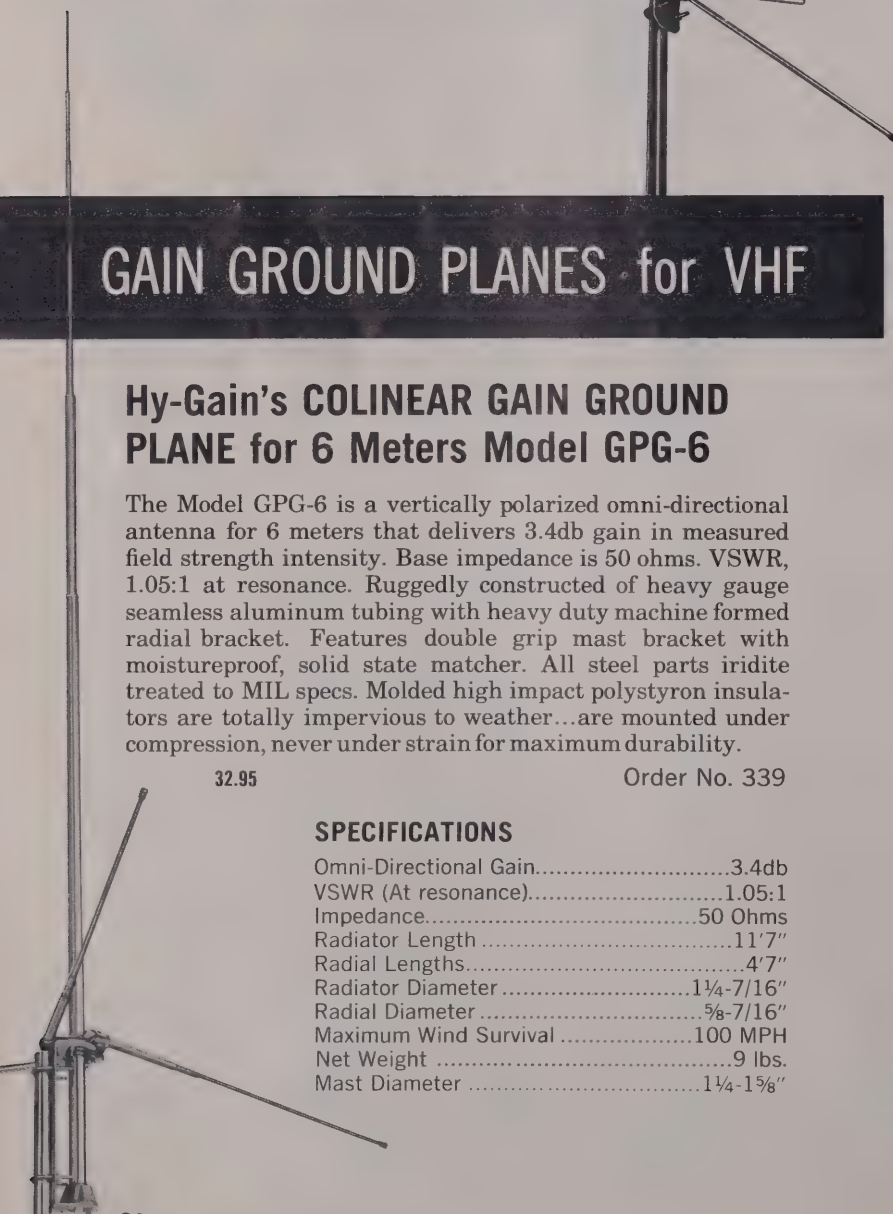
Hy-Gain's COLINEAR GAIN GROUND PLANE for 6 Meters Model GPG-6

The Model GPG-6 is a vertically polarized omni-directional antenna for 6 meters that delivers 3.4db gain in measured field strength intensity. Base impedance is 50 ohms. VSWR, 1.05:1 at resonance. Ruggedly constructed of heavy gauge seamless aluminum tubing with heavy duty machine formed radial bracket. Features double grip mast bracket with moistureproof, solid state matcher. All steel parts iridite treated to MIL specs. Molded high impact polystyron insulators are totally impervious to weather...are mounted under compression, never under strain for maximum durability.

32.95 Order No. 339

SPECIFICATIONS

Omni-Directional Gain	3.4db
VSWR (At resonance)	1.05:1
Impedance	50 Ohms
Radiator Length	11'7"
Radial Lengths	4'7"
Radiator Diameter	1¼-7/16"
Radial Diameter	⅝-7/16"
Maximum Wind Survival	100 MPH
Net Weight	9 lbs.
Mast Diameter	1¼-1⅝"



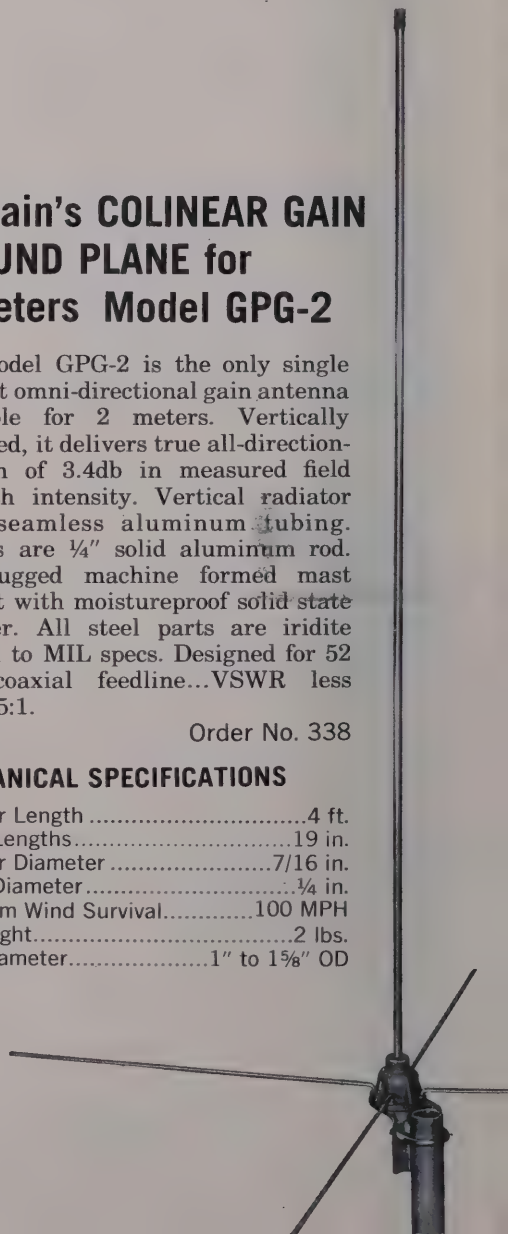
Hy-Gain's COLINEAR GAIN GROUND PLANE for 2 Meters Model GPG-2

The Model GPG-2 is the only single element omni-directional gain antenna available for 2 meters. Vertically polarized, it delivers true all-directional gain of 3.4db in measured field strength intensity. Vertical radiator is of seamless aluminum tubing. Radials are ¼" solid aluminum rod. Has rugged machine formed mast bracket with moistureproof solid state matcher. All steel parts are iridite treated to MIL specs. Designed for 52 ohm coaxial feedline...VSWR less than 1.5:1.

14.95 Order No. 338

MECHANICAL SPECIFICATIONS

Radiator Length	4 ft.
Radial Lengths	19 in.
Radiator Diameter	7/16 in.
Radial Diameter	¼ in.
Maximum Wind Survival	100 MPH
Net Weight	2 lbs.
Mast Diameter	1" to 1⅝" OD



Maximum Performance Beams

Hy-Gain's completely new line of Maximum Performance Beams for 6 meters are the product of two years of extensive research, development and field testing...research, development and field testing that has resulted in Hy-Gain again proving significant, new antenna design theories which, when incorporated in 6 meter beams, makes them deliver heretofore unprecedented gain and performance. Features you'll find in every model of Hy-Gain's new 6 meter beams include:

Scientifically Staggered Optimum Spaced Elements

All Hy-Gain 6 meter beams feature a new concept in beam construction...one that results in actual delivered performance equalling Maximum Theoretical Gain. Hy-Gain engineers found that by scientifically staggering optimum spaced elements along the boom without regard to linearity and with sole reference to increased field strength intensity and pattern control, tremendous increases in gain could be attained. Exhaustive research and field testing dealing with element spacing and element length as related to optimum non-linear spacing of elements resulted in Hy-Gain bringing to you the ultimate in maximum performance 6 meter beams.

Exclusive Hy-Gain Beta Match

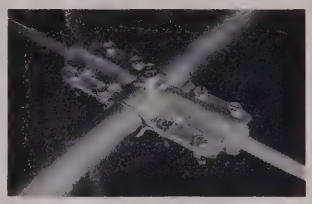
All Hy-Gain 6 meter beams feature a special VHF Beta Match configuration. The unique pre-tuned Beta Match permits maximum gain and F/B ratio with a nominal 50 ohm feedpoint impedance without detuning any of the parasitic elements. An optimum transfer of energy thus results without sacrifice in gain or pattern control.

Coaxial Balun

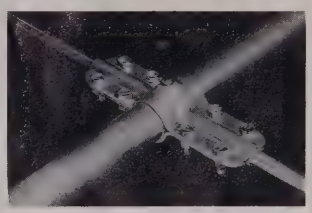
To assure perfect balance of currents to the driven element, all Hy-Gain 6 meter beams are supplied with a coaxial balun.

Mechanical Reliability

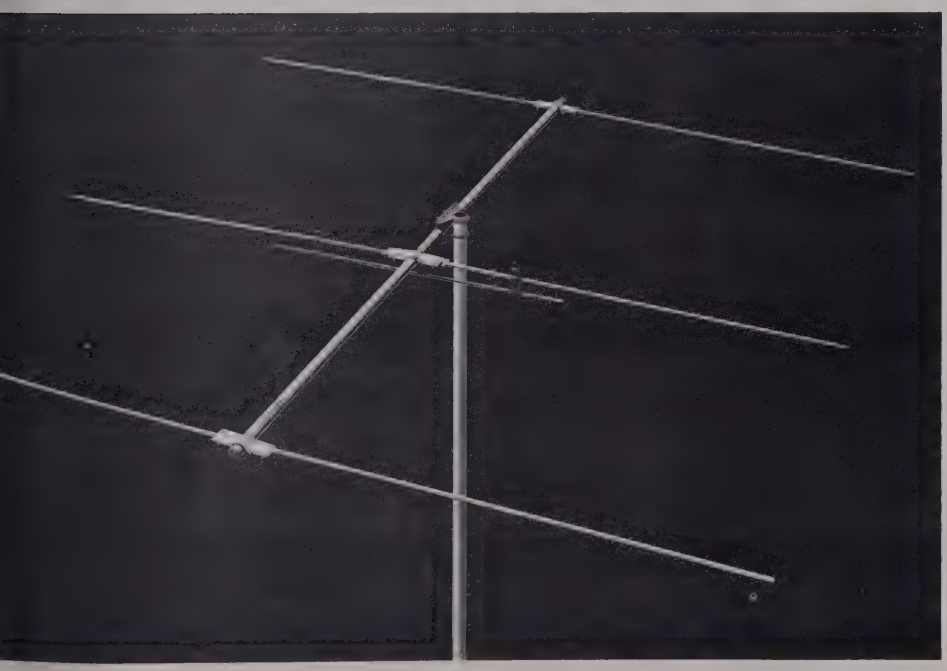
All Hy-Gain 6 meter beams are constructed of top quality, seamless aluminum tubing. Brackets are machine formed of heavy gauge aluminum. Insulators are precision molded of high impact styron for years of trouble-free service. All steel hardware is iridite treated to MIL specs and will resist rust and corrosion for much longer periods of time than will commercial grades of stainless steel. No structural details have been overlooked . . . Hy-Gain 6 meter beams are built to "take it."



Driven Element to Boom Bracket



Parasitic Element to Boom Bracket



Hy-Gain's 3-Element Model 63B

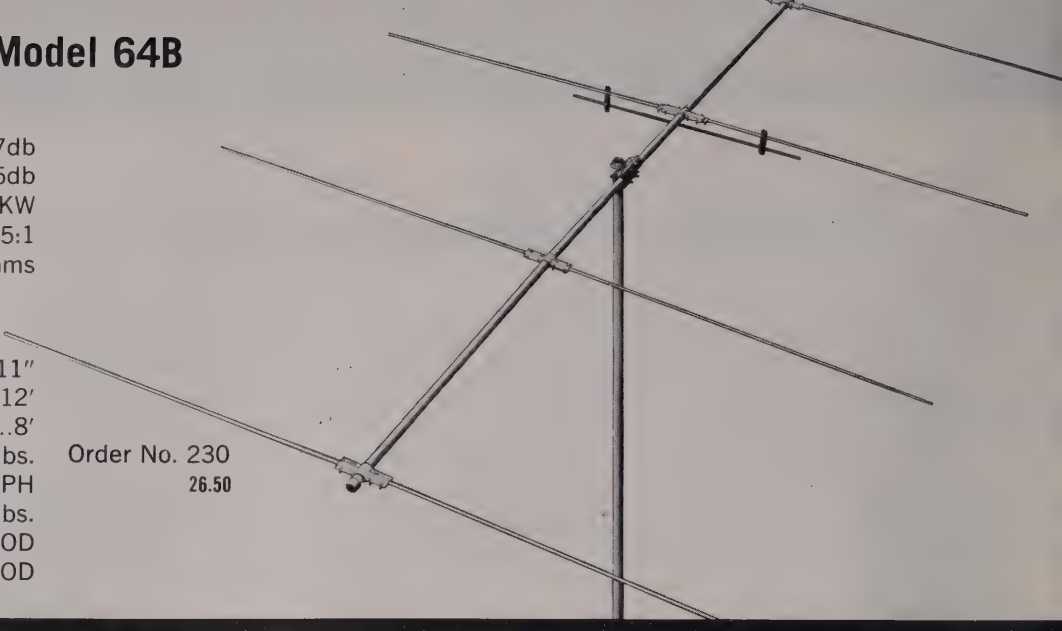
ELECTRICAL SPECIFICATIONS

Gain	10db
Front-to-Back Ratio	20-25db
Maximum Power Input	1 KW
VSWR (at resonance)	1.5:1
Impedance	52 ohms
Uni-directional Pattern	

MECHANICAL SPECIFICATIONS

Longest Element	9'10"
Boom Length	8 ft.
Turning Radius	6 ft.
Wind Load at 80 MPH	20 lbs.
Maximum Wind Survival	100 mph
Net Weight	5 lbs.
Mast Diameter	1¼" to 1⅝" OD
Boom Diameter	1¼" OD
Order No. 342	19.95

Hy-Gain's 4-Element Model 64B



ELECTRICAL SPECIFICATIONS

Gain 12.7db
Front-to-Back Ratio 20-25db
Maximum Power Input . . . . . 1 KW
VSWR (at resonance) 1.5:1
Impedance . . . . . 52 ohms
Uni-directional pattern

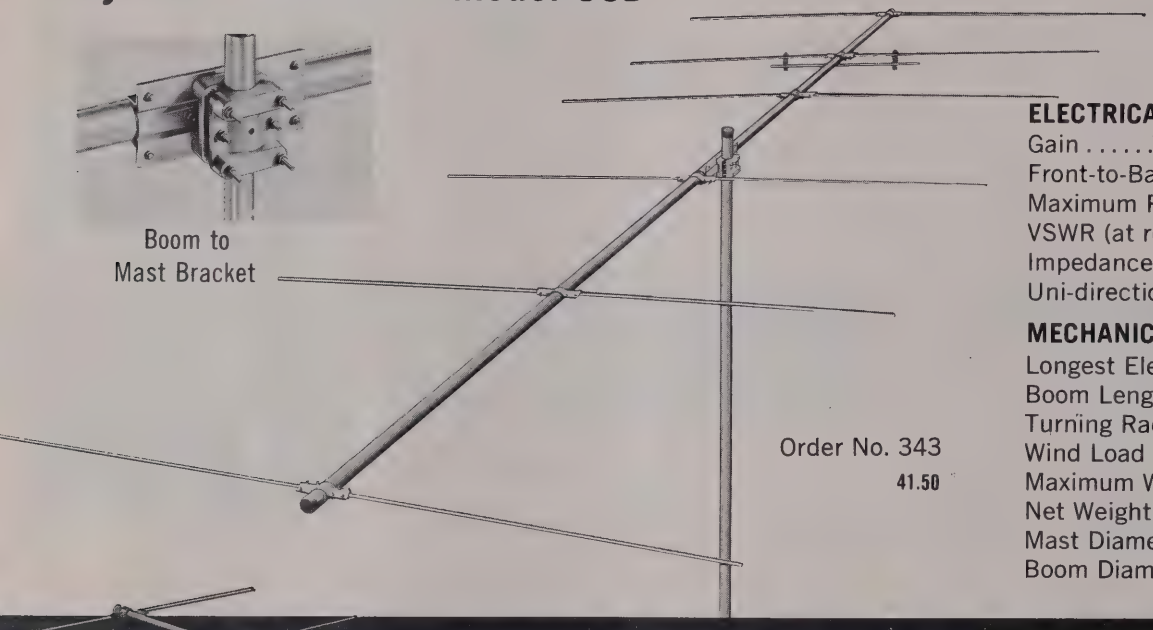
MECHANICAL SPECIFICATIONS

Longest Element . . . . . 9'11"
Boom Length . . . . . 12'
Turning Radius . . . . . 8'
Wind Load at 80 MPH . . . . . 28 lbs.
Maximum Wind Survival . . . . . 100 MPH
Net Weight . . . . . 8 lbs.
Mast Diameter . . . . . 1¼" to 1⅝" OD
Boom Diameter . . . . . 1¼" OD

Order No. 230
26.50

Hy-Gain's 6-Element Model 66B

Boom to
Mast Bracket



ELECTRICAL SPECIFICATIONS

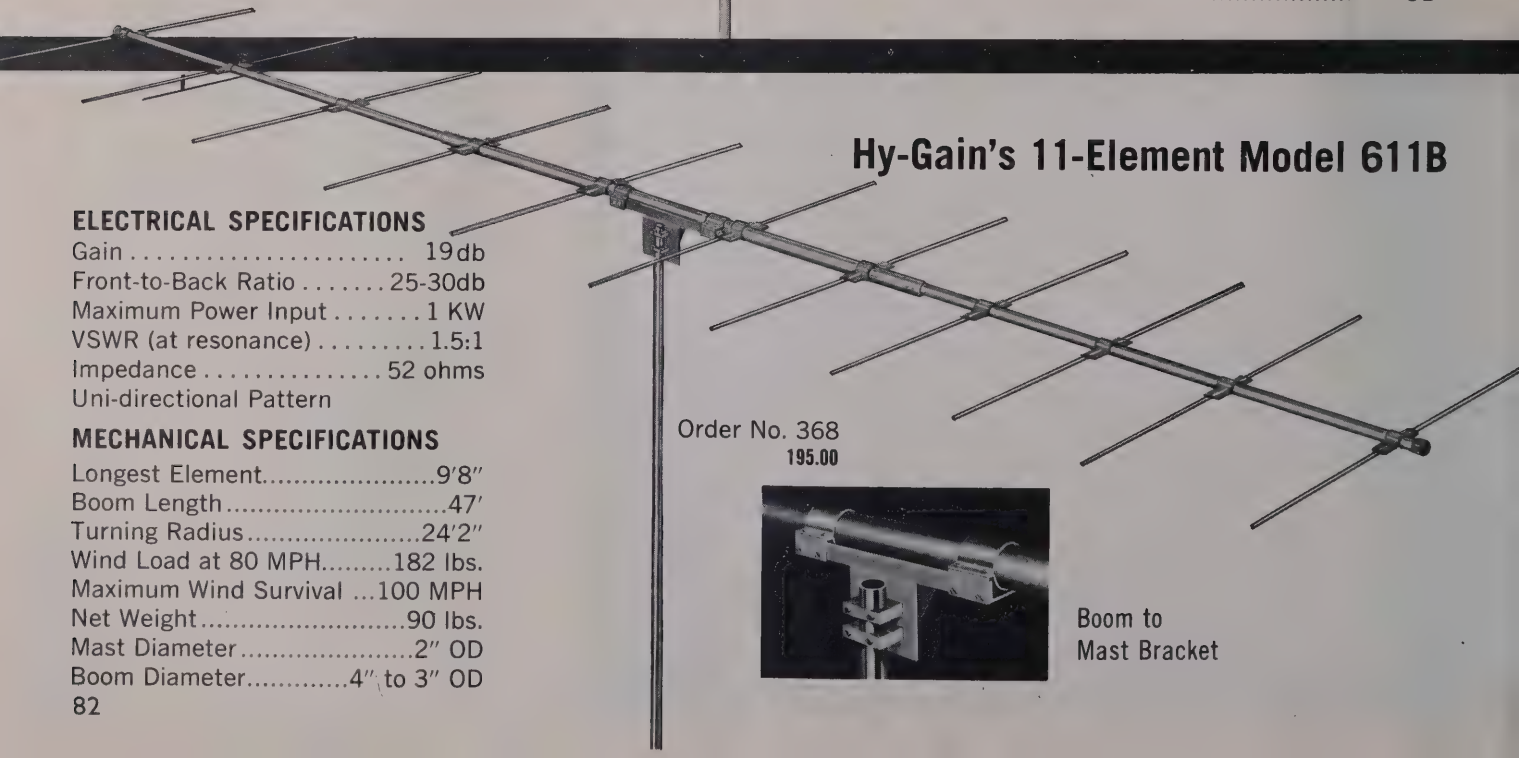
Gain 15db
Front-to-Back Ratio 20-25db
Maximum Power Input . . . . . 1 KW
VSWR (at resonance) 1.5:1
Impedance . . . . . 52 ohms
Uni-directional Pattern

MECHANICAL SPECIFICATIONS

Longest Element . . . . . 9'9"
Boom Length . . . . . 24'6"
Turning Radius . . . . . 12'6"
Wind Load at 80 MPH . . . . . 45 lbs.
Maximum Wind Survival . . . 100 MPH
Net Weight . . . . . 17 lbs.
Mast Diameter . . . . . 1¼" to 2½" OD
Boom Diameter . . . . . 2" OD

Order No. 343
41.50

Hy-Gain's 11-Element Model 611B



ELECTRICAL SPECIFICATIONS

Gain 19db
Front-to-Back Ratio 25-30db
Maximum Power Input . . . . . 1 KW
VSWR (at resonance) 1.5:1
Impedance . . . . . 52 ohms
Uni-directional Pattern

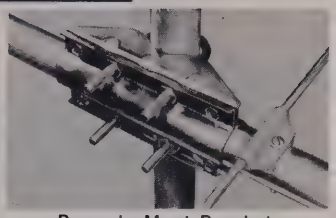
MECHANICAL SPECIFICATIONS

Longest Element . . . . . 9'8"
Boom Length . . . . . 47'
Turning Radius . . . . . 24'2"
Wind Load at 80 MPH . . . . . 182 lbs.
Maximum Wind Survival . . . 100 MPH
Net Weight . . . . . 90 lbs.
Mast Diameter . . . . . 2" OD
Boom Diameter . . . . . 4" to 3" OD

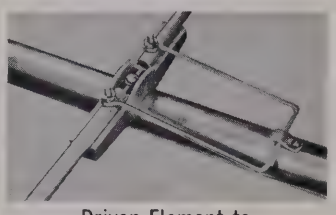
Order No. 368
195.00

Boom to
Mast Bracket

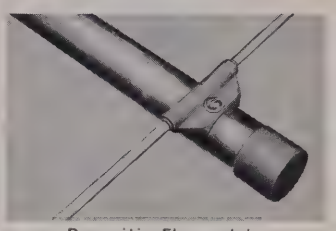
Maximum Performance Beams



Boom to Mast Bracket



Driven Element to Boom Bracket



Parasitic Element to Boom Bracket

Scientifically Staggered Optimum Spaced Elements

All Hy-Gain 2 meter beams feature a new concept in beam construction...one that results in actual delivered performance equalling Maximum Theoretical Gain.

Strategically staggered optimum spaced elements along the boom are referenced solely to increased field strength intensity and pattern control thus delivering tremendous increases in directional gain not attainable with close-spaced beams or optimum spaced beams using linearity as the sole reference.

Exclusive Hy-Gain Beta Match

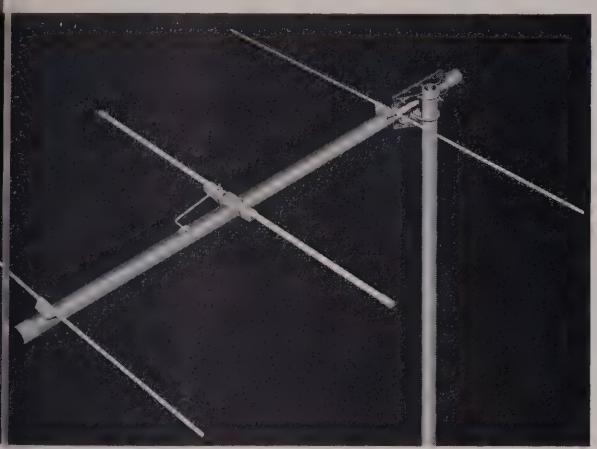
All Hy-Gain 2 meter beams feature a special VHF Beta Match configuration. The unique pretuned Beta Match permits maximum gain and F/B ratio with a nominal 50 ohm feedpoint impedance without detuning any of the parasitic elements. An optimum transfer of energy thus results without sacrifice in gain or pattern control.

Coaxial Balun

To assure perfect balance of currents to the driven element, all Hy-Gain 2 meter beams are supplied with a coaxial balun. All models are fed with 52 ohm coax.

Mechanical Reliability

All Hy-Gain 2 meter beams feature booms constructed of heavy wall, aluminum tubing. The mast brackets are machine formed of heavy gauge steel. Elements are of ¼" rod for maximum efficiency in the 2 meter frequency range. Element to boom fittings are injection molded of high impact styron...an exclusive Hy-Gain innovation. No structural details have been overlooked...Hy-Gain 2 meter beams are built to deliver the ultimate in performance and mechanical reliability.



Hy-Gain's 3-Element Model 23

ELECTRICAL SPECIFICATIONS

Gain 9db
Front-to-Back Ratio 20db
Maximum Power Input . . . . . 1 KW
VSWR (at resonance) 1.5:1
Impedance . . . . . 52 ohms
Uni-directional Pattern

Order No. 340 **9.95**

MECHANICAL SPECIFICATIONS

Longest Element.....3'6"
Boom Length.....3'
Turning Radius.....4'
Wind Load at 80 MPH.....7.8 lbs.
Maximum Wind Survival.....100 MPH
Net Weight.....3 lbs.
Mast Diameter.....1¼" to 1⅝" OD
Boom Diameter.....1¼" OD

Hy-Gain's 8-Element Model 28

ELECTRICAL SPECIFICATIONS

Gain 14.5db
Front-to-Back Ratio 25-30db
Maximum Power Input . . . . . 1 KW
VSWR (at resonance) 1.5:1
Impedance . . . . . 52 ohms
Uni-directional Pattern

MECHANICAL SPECIFICATIONS

Longest Element.....3'6"
Boom Length.....14'
Turning Radius.....7'6"
Wind Load at 80 MPH.....20.7 lbs.
Maximum Wind Survival.....100 MPH
Net Weight.....7 lbs.
Mast Diameter.....1¼" to 1⅝" OD
Boom Diameter.....1¼" OD

Order No. 341 **19.95**

Hy-Gain's 15-Element Model 215B

ELECTRICAL SPECIFICATIONS

Gain 17.8db
Front-to-Back Ratio 25-30db
Maximum Power Input . . . . . 1 KW
VSWR (at resonance) 1.5:1
Impedance . . . . . 52 ohms
Uni-directional Pattern

Order No. 231 **41.50**

MECHANICAL SPECIFICATIONS

Longest Element.....3'6"
Boom Length.....28'
Turning Radius.....14'
Wind Load at 80 MPH.....50 lbs.
Maximum Wind Survival...100 MPH
Net Weight.....17 lbs.
Mast Diameter.....1⅝" OD
Boom Diameter.....1¼" OD

Hy-Gain's 6 and 2 Meters BEAM Model DB62

The Model DB62 is a single transmission line beam for 6 and 2 meter operation...4 elements on 6 meters...18 elements on 2 meters. Develops 8db forward gain on 6 meters and 15db gain on 2 meters. Boom is constructed of heavy gauge 1¼" seamless aluminum tubing. Elements are of hard drawn aluminum tubing. Insulators are molded high impact polystyron for maximum weatherability. Truly delivers outstanding performance on both 6 and 2 meters while offering outstanding mechanical reliability. Feeds with 52 ohm coaxial feedline.

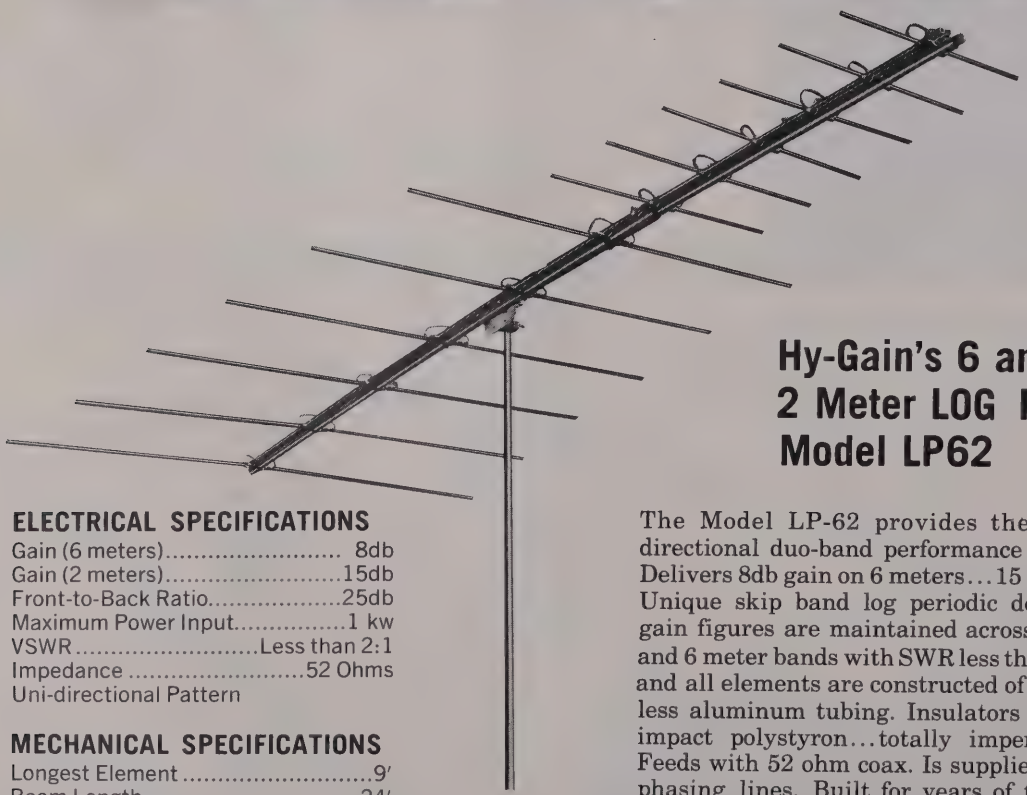
Order No. 326 **41.50**

ELECTRICAL SPECIFICATIONS

Forward Gain (6 Meters)	8db
Forward Gain (2 Meters)	15db
Front-to-Back Ratio	15-20db
Maximum Power Input	1 kw
VSWR (At resonance)	1.5:1
Impedance	52 Ohms
Uni-directional Pattern	

MECHANICAL SPECIFICATIONS

Longest Element	10′
Boom Length	10′
Turning Radius	7′
Wind Load at 80 MPH	55 lbs.
Net Weight	8 lbs.
Maximum Wind Survival	100 MPH
Mast Diameter	1⅝" OD



Hy-Gain's 6 and 2 Meter LOG PERIODIC Model LP62

The Model LP-62 provides the ultimate in unidirectional duo-band performance on 6 and 2 meters. Delivers 8db gain on 6 meters...15 db gain on 2 meters. Unique skip band log periodic design insures rated gain figures are maintained across the entire 2 meter and 6 meter bands with SWR less than 2:1. Double boom and all elements are constructed of heavy gauge seamless aluminum tubing. Insulators are molded of high impact polystyron...totally impervious to weather. Feeds with 52 ohm coax. Is supplied complete with all phasing lines. Built for years of trouble-free service.

Order No. 353 **62.50**

ELECTRICAL SPECIFICATIONS

Gain (6 meters)	8db
Gain (2 meters)	15db
Front-to-Back Ratio	25db
Maximum Power Input	1 kw
VSWR	Less than 2:1
Impedance	52 Ohms
Uni-directional Pattern	

MECHANICAL SPECIFICATIONS

Longest Element	9′
Boom Length	24′
Turning Radius	16′
Net Weight	20 lbs.
Maximum Wind Survival	100 MPH
Mast Diameter	1⅝" OD

hy-gain ACCESSORIES

NEW!

Hy-Gain BROAD BAND FERRITE BALUN BN-86

Can be used with any beam type antenna in the range of 3 to 30 MHz

COMES COMPLETE WITH ALL HARDWARE (includes U-bolt not shown) FOR BEAM AND DOUBLET INSTALLATION

Hy-Gain's ferrite balun provides a way to couple a 52 ohm unbalanced transmission line into a 52 ohm balanced system (beam antenna).

It improves the transfer of energy to the antenna—eliminating stray RF from the feedline and supporting tower. When a beam or dipole antenna is fed directly from a coaxial line, there is an unbalanced condition, due to the fact that currents can flow down the outside (shield) of the coax. These currents radiate and thus affect both the pattern and the front-to-back ratio. In addition they cause TVI and drain away effective power.

The electrical principal of operation is similar to that of a 1:1 transformer. It is frequency independent and will operate over all ham bands.

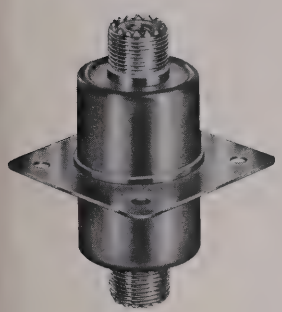
Order No. 242 **14.95**

MECHANICAL SPECIFICATIONS

Weight	1 lb.
Dimensions	3¼ x 6¼"
Input Receptacle	SO 239
Output Receptacle	Standard Terminal Lugs
Weather Protection	Internally Sealed
Housing Material	High Impact Injection Molded, Cycolac Plastic

ELECTRICAL SPECIFICATIONS

Bandwidth	3 through 30 MHz Continuous
VSWR	1:1 (when terminated with a balanced 52 ohm load)
Power Rating	1 KW DC
Impedance Transformation Ratio	1:1 at 52 ohms
Input Connector	SO 239
Insertion Loss	Negligible
Feed-through Loss	Negligible



SPECIFICATIONS

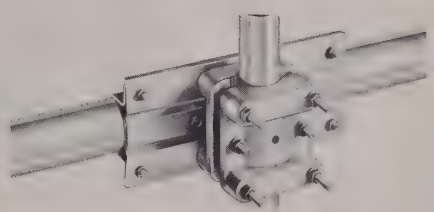
Connectors	SO-239 Type UHF Coax
Insertion Loss	Negligible
Weight	5 oz.

Hy-Gain LIGHTNING ARRESTOR Model LA-1

Originally designed to protect electronic gear aboard military aircraft, the precision-built Model LA-1 is the only lightning arrester on the market that will safely by-pass to ground 10 or more direct lightning strokes. It is designed for installation in any standard 52 or 72 ohm coaxial feedline. Properly installed, the Model LA-1 effectively removes static build-up around your antenna system thus vastly reducing the possibility of your equipment being hit by a direct stroke of lightning. Don't confuse the Model LA-1 with combination spark gap fuse type devices that "blow" when subjected to minor electrical surges. When properly installed and maintained, the Model LA-1 offers you lifetime protection against the hazards of lightning being carried through your feedline. Truly the only long-term lightning protection you can buy.

Order No. 229 **24.25**

Hy-Gain's New Aluminum Tilting Boom-to-Mast Clamp Model BMC



Cast aluminum, universal boom-to-mast clamp fits any mast 1¼" to 2½". Tilting feature allows easy one-man installation, maintenance and tuning. Rugged construction also provides mast feed-thru for beam stacking.

Fits 2" OD boom. Order No. 249 **14.95**

Hy-Gain "ON THE AIR" Indicator Model HL

Give your shack that "professional look" with Hy-Gain's dramatic, internally illuminated red on black "ON THE AIR" indicator. Encased in an attractive gray high impact styron case, the Hy-Lite mounts atop gear or on wall brackets. Easily attached to antenna changeover relay or transmitter control relay. Bulb and 6' electrical cord are included. Attractively housed in 4"×8" oval case that is 5" deep. Shpg. Wt., 1 lb.

Order No. 327 **8.95**

Hy-Gain's 4-Element STACKED JAY-POLE Model SJ2S4 ■ Delivers 6.2db Gain

The Model SJ2S4 is a high performance all drîven stacked array of vertically polarized dipoles that deliver 6.2db omnidirectional gain. Uniquely designed phasing and matching harness maintains a perfect parallel phase relationship and is center fed to minimize beam tilting for better low angle radiation. The driven element maintains an extremely broad band response and effective isolation from the supporting mast. Open construction minimizes failure due to moisture and condensation. Entire antenna is at DC ground for static removal and lightning protection. Feeds with 52 ohm coaxial feedline. May be side-mounted on mast or mounted on a roof saddle.

Order No. 362 **74.95**

ELECTRICAL SPECIFICATIONS

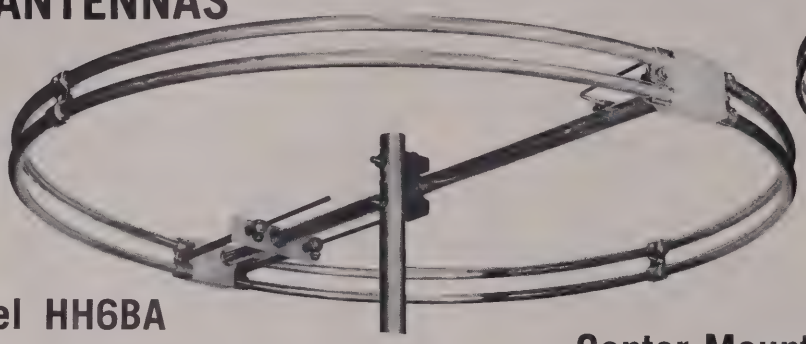
Gain	6.2db
Power Limit	1 kw PEP; 250 watts AM*
VSWR (at resonance)	1.2:1
Impedance	50 ohms
Omni-directional Pattern	

MECHANICAL SPECIFICATIONS

Mast Height	21 ft.
Insulators	High Impact Styron
Net Weight	20 lbs.
Mast Diameter	2 in.
Accepts Mounting Mast	1¼"-1⅝"

MOBILE ANTENNAS

Hy-Gain's Center Mount 6 Meter HALO Model HH6BA



The Model HH6BA employs rugged center mount design which insures the highest possible degree of mechanical reliability while eliminating pattern distortion generally prevalent with off-center mount halos. Delivers a perfect omni-directional pattern and excellent impedance control making it the most efficient mobile halo available. It is constructed of heavy gauge seamless aluminum tubing with high impact, injection molded styron insulators. Uses heavy gauge, machine formed mounting hardware. Features exclusive Hy-Gain Beta Match to insure optimum transfer of energy. Supplied with tuning rods for precise adjustment to frequency.

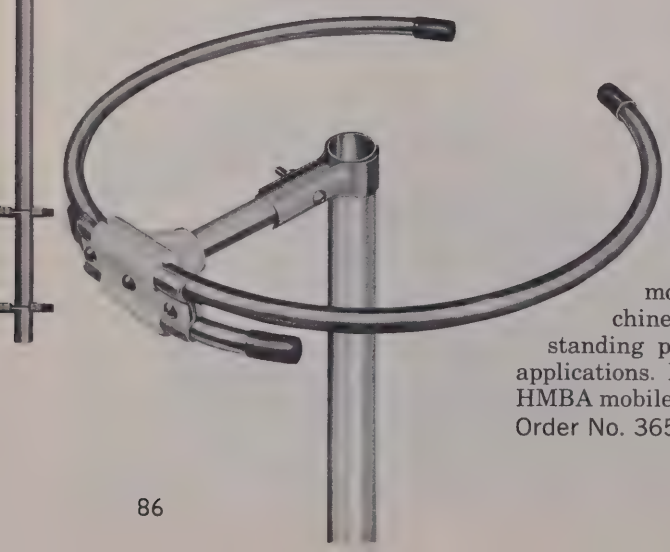
Order No. 366 **14.95**

Center Mount 6 Meter HALO with Mast & Bumper Mount Kit Model HH6BK

The Model HH6BK includes a Hy-Gain model HH6BA 6 meter halo along with a heavy wall aluminum telescoping mast (Model HMBA) and a Hy-Gain Model BPR stainless steel bumper mount. Comes complete with everything needed for quick installation on any car.

Order No. 371 **26.50**

Hy-Gain's Center Mount 2 Meter HALO Model HH2BA



The Model HH2BA uses rugged center mount design to insure the highest possible degree of mechanical reliability while eliminating pattern distortion generally prevalent with off-center mount halos. Delivers a perfect omni-directional pattern and improved impedance control making it the most efficient 2 meter halo available. Features exclusive Hy-Gain Beta Match to insure optimum transfer of energy. Constructed of heavy gauge seamless alumimum tubing with high impact, injection molded styron insulators. Uses heavy gauge machine formed mounting hardware. Provides outstanding performance in both base station and mobile applications. For mobile installations, use Hy-Gain Model HMBA mobile mast.

Order No. 365 **7.95**

hy-gain MOBILE ANTENNAS

Hy-Gain's TELESCOPING MAST for MOBILE HALO Installations Model HMBA

■ **Accommodates Single Halo or Stacked Array**

The Model HMBA is a heavy wall telescoping mast assembly expressly designed to provide rugged support for a Hy-Gain 6 or 2 meter center mount halo or for stacking Hy-Gain 6 and 2 meter halos for duo-band operation. Constructed of 1" seamless aluminum tubing, it terminates at the base with a standard ⅜"×24 thread stud for installation on any standard mount. Maximum efficiency from a stacked duo-band array requires separate 52 ohm feedlines.

Order No. 363 **7.95**

Hy-Gain's 6 and 2 Meter WHIP Model CRG150

■ **Delivers 3db Gain on 2 Meters**

The Model CRG150 is an extremely efficient and versatile vertically polarized omni-directional whip for use on both 6 and 2 meters. Photographically etched copper loading coil electrically extends the antenna to ⅝ wavelength on 2 meters; to a full ¼ wavelength on 6 meters. Provides 3db gain on 2 meters; highly efficient ¼ wave performance on 6 meters...is ideally suited for either or both 6 and 2 meter operation. Whip is constructed of top quality taper ground stainless steel. Unique claw mounting assembly makes for easy installation on rooftop or deck. Feeds with 52 ohm coaxial cable. Net weight, 1 lb.

Order No. 764 **26.50**

SPECIFICATIONS

Gain (2 Meters)	3db
Gain (6 Meters)	Unity
VSWR (At resonance)	1.5:1
Maximum Power	100 Watts
Nominal Impedance	52 ohms
Overall Length	55 in.

CLAW MOUNT

Hy-Gain's Magnet Mount High Band/UHF Mobile Model MAG150

The MAG150 features an Alnico magnet mount that will hold the antenna in place at speeds up to 100 mph. It covers the 108-450 MHz range. Installs instantly... removes instantly when parking in uncertain areas. Aluminum flange on base is capacitively grounded so there's no need to remove paint. Comes with 18 feet of RG-58u and connector.

Order No. 759 **13.95**

Hy-Gain's ¼ Wavelength ROOF MOUNT WHIP for 108 thru 470 MHz Model MW150

The Model MW150 is a commercial duty ¼ wavelength mobile whip that is precision tunable to any discrete frequency in the 108 thru 470 MHz frequency range using cutting chart supplied with the antenna. It is designed for superior performance rooftop mounting. The radiator is constructed of flexible 17-7PH stainless steel. It is equipped with an injection molded styron base mount with solderless connector for RG-58/U coaxial cable. Leakproof installation is easily accomplished from the exterior surface of any vehicle using revolutionary single hole mounting assembly developed by Hy-Gain.

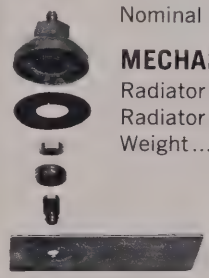
Order No. 703 **3.35**

ELECTRICAL SPECIFICATIONS

Omni-Directional Gain	Unity
Maximum Power	250 Watts
Frequency Range (Adjustable)	108 to 470 MHz
VSWR (At resonance)	1.1:1
Band Width for 1.1:1 VSWR	±10%
Nominal Impedance	50 Ohms

MECHANICAL SPECIFICATIONS

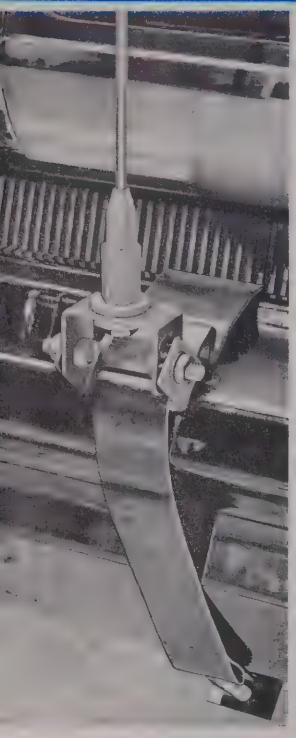
Radiator Material	17-7PH Stainless Steel
Radiator Length	¼ Wavelength
Weight	8 oz.



Hy-Gain Full Sized STAINLESS STEEL WHIP for 28 thru 100 MHz Model W96

The Model W96 is a 96" taper-ground, high flex stainless steel whip that is equipped with a removable ⅜"×24 thread stainless steel stud which allows cutting of the antenna to any frequency between 28 and 100 MHz. Cutting chart is supplied for tuning to frequency.

Order No. 317 **10.95**



Hy-Gain Heavy Duty Bumper Mount Model BPR

Ruggedly constructed of ever-enduring stainless steel, the Model BPR is ideally suited for full sized mobile whip and halo installations. Clamps securely to any car bumper and accepts standard ⅜″×24 thread fittings. Features exclusive stainless steel strap that is over twice as strong as conventional chain mounts...will not mar bumper. Is fully adjustable for vertical alignment. Net wt., 1½ lbs.
Order No. 415 **7.95**

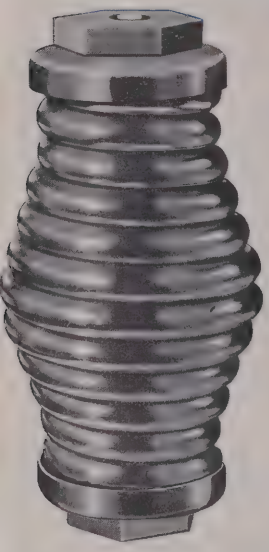
Exclusive Hy-Gain Flush Body Mount Model BDYF

Stylish chrome-plated flush body mount with molded cycolac base, rubber body washer, and heavy gauge back-up plate. Provides rugged support for whip or spring and whip. Accepts standard ⅜″×24 thread fittings. Extra-sturdy installation requires access from underside of body panel. Net wt., 1½ lbs.
Order No. 499 **5.85**

Hy-Gain Deluxe Jiffy Body Mount Model JMS

A completely adjustable body mount that easily installs on the trunk lip of most vehicles without drilling holes in exterior surfaces. Heavy duty stainless steel construction for lasting durability. Accepts standard ⅜″×24 thread fitting. May also be installed in hood groove, on door edge or many other places on any vehicle. Quickly and easily installed...requires only two small 7/32″ holes. Net wt., ¾ lb.
Order No. 548 **4.95**

Hy-Gain MOBILE SPRINGS



Deluxe Spring Model SPG

A heavy duty chrome-plated double-tapered steel spring with spring ends carefully ground for perfect alignment. Accepts ⅜″×24 thread fittings at both ends. Net wt., 2 lbs.
Order No. 417 **5.95**

Extra Heavy Duty Spring Model SPGH

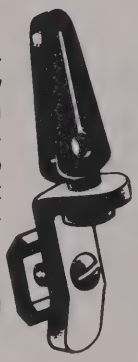
Chrome-plated extra heavy duty spring expressly designed for rigid support of heavy mobile antennas. Same features and craftsmanship as Model SPG above. Net wt. 3 lbs.
Order No. 511 **8.95**

Hy-Gain Miniature Spring Model SPGM

Handsome super strength stainless steel miniature spring. Double tapered design. Accepts ⅜″×24 thread fittings. Comfortably handles whips up to 52″ long. Net wt., 1 lb.
Order No. 492 **2.80**

INSULATED GUTTER CLIP Model GC

Handsome gutter clip secures mobile whip for low garaging. Mounts on car with single screw without piercing car body. Key hole whip anchor is plastic. It won't rattle and won't short. Shipping weight, .1 lbs.
Display Packaged
Order No. 573 **1.00**



Hy-Gain Quick-Disconnect Model QD

The Model QD is the perfect answer for flip-of-the-wrist removal and attachment of mobile whips. Comes with ⅜″×24 thread fittings at both ends for permanent attachment to most mounts and antennas. High tension spring loading insures stable transfer of energy. Heavily chrome-plated for maximum durability. Net wt., 6 oz.
Order No. 531 **2.89**

Hy-Gain Body Mount Coaxial Adapter Model CA

Readily converts exposed terminals of mobile antenna body mounts to standard SO-239 coaxial fitting. Net wt., 6 oz.
Order No. 493 **1.95**

Hy-Gain Fold-Over Adapter for Mobile Whips Model FOA

Sensational new spring-loaded hinged adapter that folds mobile antenna over for low garaging or when struck by immovable object. Easily snaps into locked upright position for all driving conditions. Ever-enduring stainless steel throughout with spring tension adjustable to fit the individual need. Replaces conventional spring—offers greater protection for any mobile antenna using ⅜″×24 thread stud. Net wt., 12 oz.
Order No. 550 **4.80**

Hy-Gain's ALL-NEW HAMCAT

- **Widest bandwidth**
- **Highest power handling**
- **Lowest heat drift ratio available**

The Hamcat has a shake proof sleeve clutch that releases a fold-over hinge. The base swivels. This makes it quick and easy to change bands and to fold your antenna to garage it. The highly polished mast is a hefty 5/8" diameter solid heat-treated aluminum rod.

We've also done away with the old fashioned plastic shrink tubing and sealed the lightweight precision wound coils in an indestructible epoxy-fiber glass sleeve. All fittings are heavy chrome plated brass.

The new Hamcat combines higher "Q" with wider bandwidth performance, without using a lossy heat generating coil typical of all previous Ham mobiles. You get the widest bandwidth coupled with the highest power handling and at the same time get the lowest heat drift ratio available.

Another great and outstanding achievement of the Hamcat is that you get a nominal 52 ohm impedance on all bands. This means that you do not have to have any special matching. (Any length of coax will work.)

Order No. 257 Mast Assembly **$12.95**

ELECTRICAL SPECIFICATIONS:

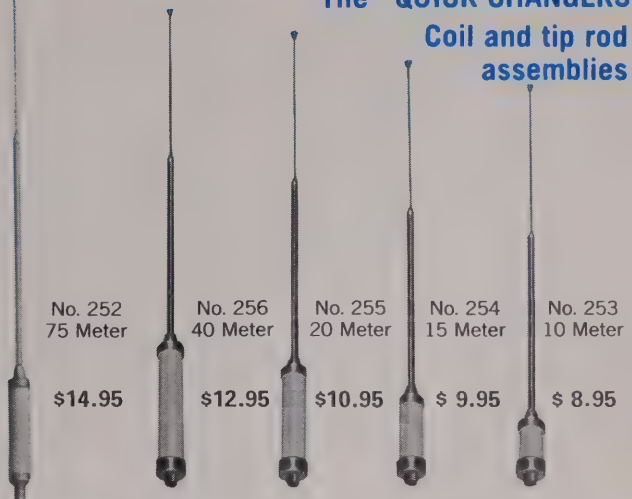
• Nominal 52 ohm impedance—no special matching device needed. • Widest bandwidth, highest power handling—vs.—heat drift ratio available. • Lowest VSWR available. • Power rating—will handle any ham mobile transceiver made without excessive heat or drift.

MECHANICAL SPECIFICATIONS:

• Turn-over mast is hefty 5/8" dia. solid rod of highly polished heat-treated aluminum. • All connections are standard 3/8 x 24 thread. • Mast folds over, swivels, and turns over. You can mount it on bumper or deck. In addition, this flexibility makes it easy and simple to change coils. • Stainless steel swivel base. • Coil and tip rods are a one-piece assembly. Coil diameters are constant, only lengths change.

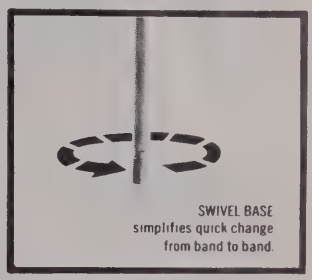
The "QUICK CHANGERS"

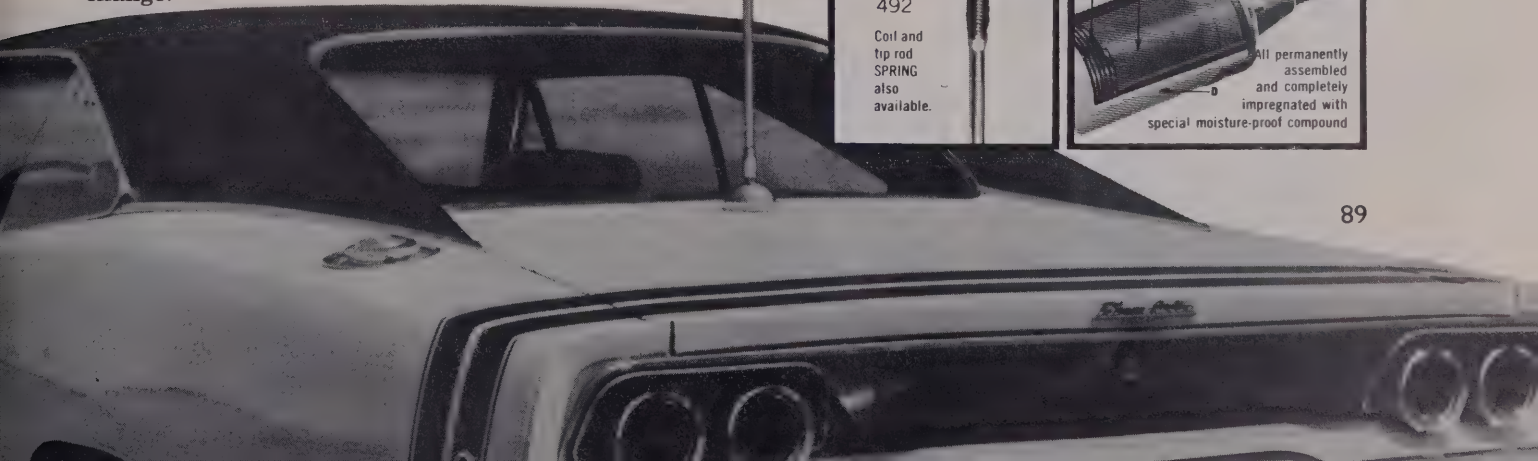
Coil and tip rod assemblies



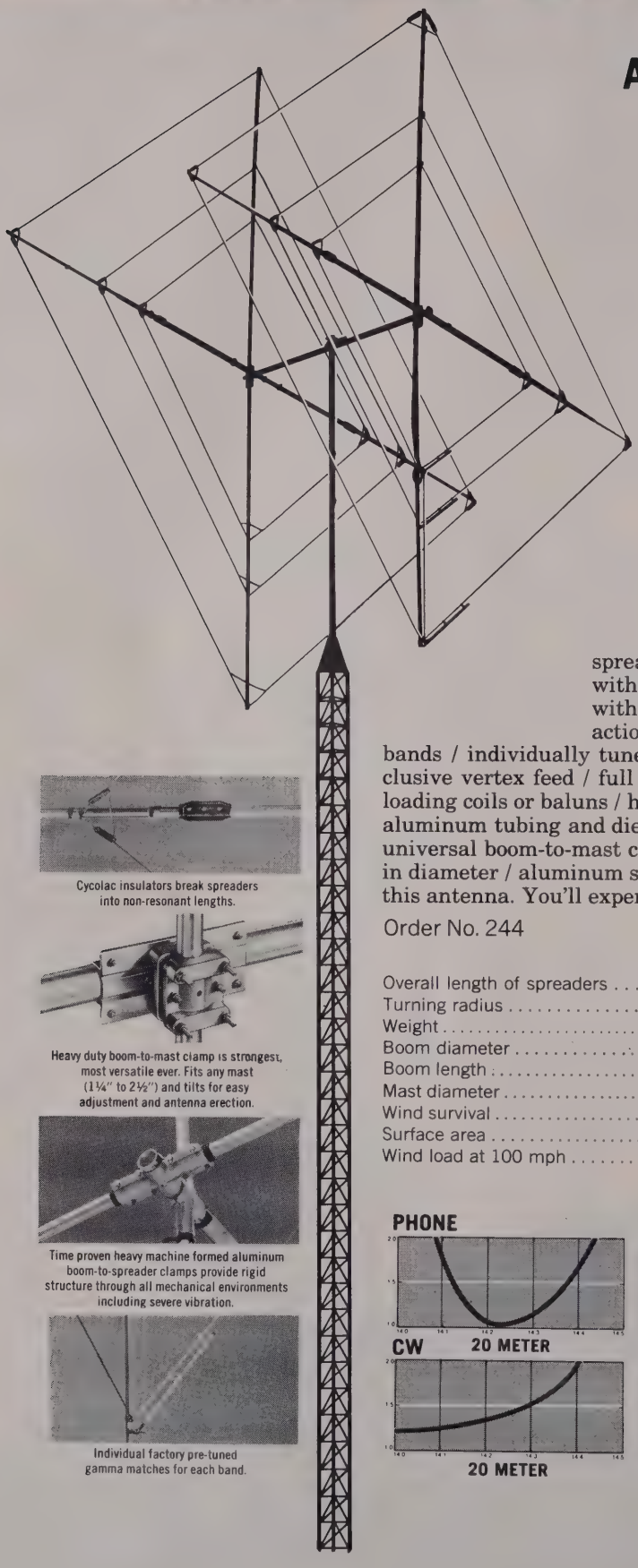
No. 252 75 Meter	No. 256 40 Meter	No. 255 20 Meter	No. 254 15 Meter	No. 253 10 Meter
$14.95	$12.95	$10.95	$ 9.95	$ 8.95

Spectacular performance from a team of lightweights! These beautiful, lightweight, precision wound coils are sealed in an indestructible epoxy fiber glass sleeve. It's a distinctive white that teams with the heavy chrome plated brass fittings to accent the beauty of any modern automobile. The new Hamcat coil and tip rod assemblies combine higher "Q" with wider bandwidth performance, without using lossy-heat generating coils that you will find in others. So, the Hamcat not only has the looks that you are waiting for, it also has the performance that you've been waiting for.





hy-gain NEW QUAD for 10, 15 and 20 METERS



ALL-NEW 3-BAND, 2 ELEMENT HY-QUAD

- **Makes all other quads obsolete!**
- **Complete—nothing else to buy**
- **High strength, low wind load**

The Hy-Quad from Hy-Gain makes all other quads obsolete! Here's why:

First, it's the only quad that is complete. There is nothing more to shop for or buy.

Secondly, it is uniquely designed so that it overcomes all of the previously undesirable features inherent in quads.

The all aluminum structure stays up! The single feed line and diamond shape simplifies feed line routing.

Hy-Gain's all new Hy-Quad will outdo all other quads because it's engineered to do just that. The Hy-Quad is new, it's superior, it's complete. It's the first quad to have everything: spreaders are broken up at strategic electrical points with Cycolac insulators / tri-band 2 element construction with individually resonated elements with no interaction / Hy-Quad requires only one feed line for all three bands / individually tuned gamma matches on each band with Hy-Gain exclusive vertex feed / full wave element loops require no tuning stubs, traps, loading coils or baluns / heavy duty mechanical construction of strong swaged aluminum tubing and die formed spreader-to-boom clamps / extra heavy duty universal boom-to-mast clamp that tilts and mounts on any mast 1¼" to 2½" in diameter / aluminum stranded wire. You can open and close the bands with this antenna. You'll experience the thrill of real DX.

Order No. 244 HAM NET $99.95

Cycolac insulators break spreaders into non-resonant lengths.

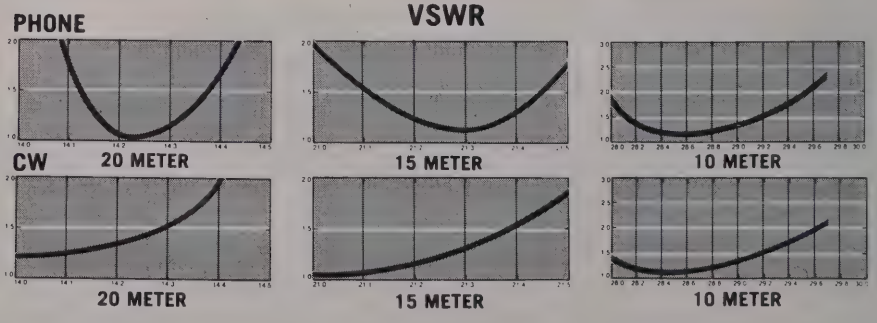
Heavy duty boom-to-mast clamp is strongest, most versatile ever. Fits any mast (1¼" to 2½") and tilts for easy adjustment and antenna erection.

Time proven heavy machine formed aluminum boom-to-spreader clamps provide rigid structure through all mechanical environments including severe vibration.

Individual factory pre-tuned gamma matches for each band.

SPECIFICATIONS

Overall length of spreaders	25'5"
Turning radius	13'6"
Weight	42 lbs.
Boom diameter	2"
Boom length	8'
Mast diameter	1¼" to 2½"
Wind survival	100 mph
Surface area	6.4 sq. ft.
Wind load at 100 mph	256.0 lbs.
Forward gain	8.5 db
Input impedance	52 ohms
VSWR	1.2:1 or better at resonance on all bands
Power	Maximum legal
Front-to-back ratio	25-35 db depending upon electrical height
Polarization	Horizontal



Mosley ····· TA-33 & TA-33 Jr.

The Mosley TA-33, three element beam, provides outstanding 10, 15 and 20 meter performance. Exceptionally broadband – gives excellent results over full Ham bandwidth. Exclusive Mosley trap design offers resonant frequency stability under all weather conditions. Element center sections are of double thickness aluminum to reduce sag. Boom requires no bracing. Heavy duty universal mounting plate fits masts up to 1½ inch O.D. Antenna handles full KW, amplitude modulated. Feed with one coax line, RG-8/U recommended. The TA-33 may be used on 40 Meters (see Conversion Kits – Page 10).

Mosley TA-33 Jr. incorporates the famous "Trap-Master" quality and performance found in TA-33 but at a reduced price. Now even low power "rigs" will have real "authority" even on the crowded bands of today. Rated to 300 watts, AM and CW, – 1000 watts P.E.P. on SSB. The Junior may be converted to MP-33 with higher power rating (See Page 10).

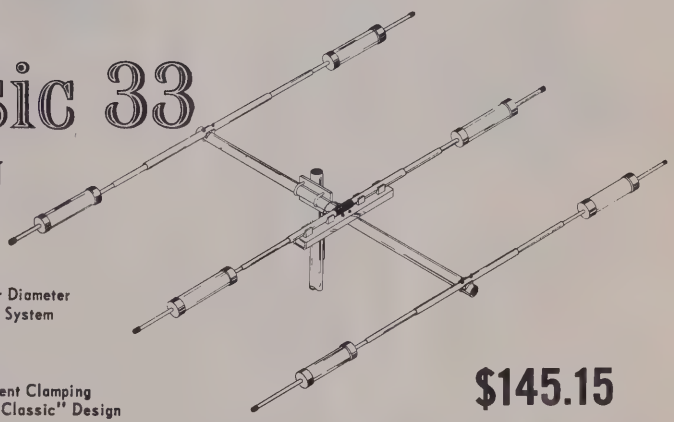
	MODEL TA-33	MODEL TA-33 JR.
Forward Gain	Up to 8 db.	Up to 8 db.
Front-to-back	20 db. or better	20 db. or better
Standing Wave Ratio	1.5 to 1 or less.	1.5 to 1 or less
Max. Element Length	28 feet	26 feet 8 inches
Boom Length	14 feet	12 feet
Turning Radius	15.5 feet	14 feet 9 inches
Wind Load	114 pounds	86 pounds
Wind Surface	5.7 Square feet	4.3 Square feet
Assembled Weight	37 pounds	20 pounds
Shipping Weight	41 pounds	28 pounds
	$133.10	**$92.75**

Another addition to the Trap-Master line, The Classic 33, rated for 10, 15, and 20 meters. Features a New Matching system, 'Broad Band Capacitive Matching' for additional DX gain. Incorporates exclusive Mosley 'weather-proved' traps with resonant frequency stability. This extra sturdy beam features improved boom to element clamping, balanced radiation and a longer boom for even wider element spacing. S/s hardware. Fits up to 2" mast. Use with most heavy duty rotors.

FORWARD GAIN: Full 8 db. gain on all 3 bands compared to reference dipole or 10.1 db. over isotropic source.
FRONT-TO-BACK: 20 db. or better on 15 and 20; 15 db. on 10 meters.
STANDING WAVE RATIO: 1.5/1 or better.
MAXIMUM ELEMENT LENGTH: 27 ft.
BOOM LENGTH: 18 ft.
TURNING RADIUS: 16 ft.
WIND LOAD (80 MPH EIA Std.) 120 lbs.
WIND SURFACE: 6 sq. ft.
ASSEMBLED WEIGHT: 42 lbs.
SHIPPING WEIGHT: Approx. 45 lbs.
MATCHING: Broad band capacitive matching. 52 ohm
POWER RATED: 1 KW AM/CW, 2 KW P.E.P. SSB input to the final.

Mosley Classic 33

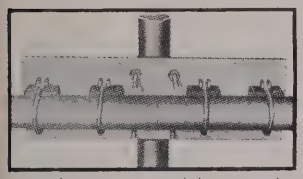
10, 15, & 20 Meter Beam



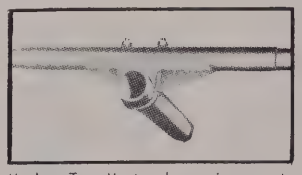
FEATURES:

- Longer Boom of Greater Diameter
- Revolutionary Matching System
- Balanced Radiation
- Wider Element Spacing
- Additional Gain
- Improved Boom to Element Clamping
- World Famous Mosley "Classic" Design
- Full Power Rating

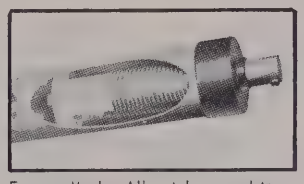
$145.15



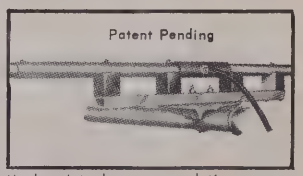
Beam features improved boom to element clamping through stronger clamping blocks and revised clamping methods.



Mosley Trap-Master beams incorporate stainless steel hardware known to survive the rigors of climate, long use.



Famous Mosley All-metal encased traps were developed for use in World-Famous Trapmaster beams.



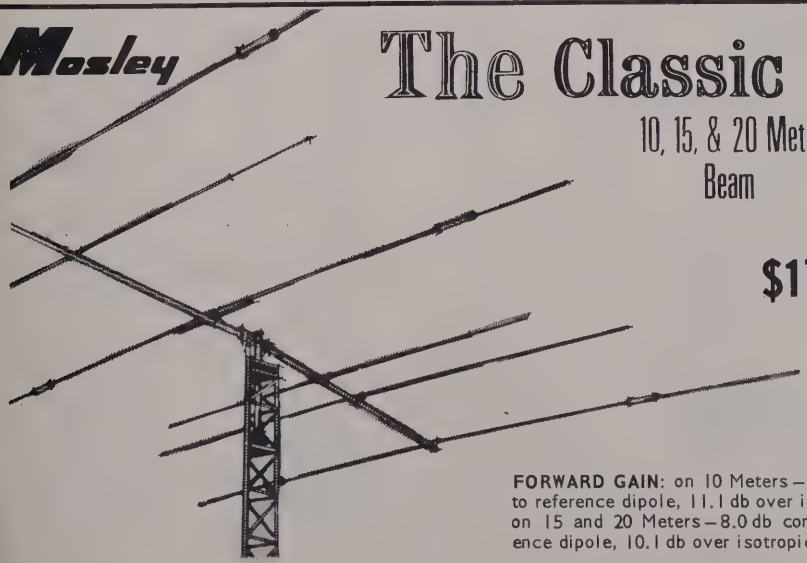
Mosley introduces a revolutionary new beam matching system "broad band capacitive matching"... balanced element is coax fed. Type N connectors supplied.

Mosley

The Classic 36

10, 15, & 20 Meter Beam

$171.92



You've been hearing about the Classic Feed System and its phenomenal success in three-element configurations. Now—in response to repeated requests—this revolutionary new matching system, Balanced Capacitive Matching, has been incorporated into the original six-element configuration of DX-proven TA-36 to create the new Classic 36. This tri-band beam, rated for maximum legal power on 10, 15, and 20 meters, features the Classic coax-fed balanced element for more efficient beam performance, increased bandwidth, and maximum gain.

Front-to-Back Ratio: 20 db or better on each band
Number of Elements: 6
Maximum Element Length: 29 ft. 3 in.
Boom Length: 24 ft.
Recommended Mast Size: 2 in. OD
Turning Radius: 19 ft. 3 in.
Wind Surface Area: 10.7 sq. ft.
Wind Load (EIA Std. 80 MPH): Horizontal 210.1 lbs.
Assembled Weight: 69 lbs.

FORWARD GAIN: on 10 Meters – 9.0 db compared to reference dipole, 11.1 db over isotropic source; on 15 and 20 Meters – 8.0 db compared to reference dipole, 10.1 db over isotropic source.

New-Tronics HUSTLER HAM PRODUCTS

Model CM-52 installs in feedline and continuously measures standing wave ratio and optimum relative output power, excellent for tune up. Uses matched diodes for accurate performance. Handles full legal power. Covers 1 to 200 MHz.

HAM NET $31.95

Improve Your Signal!

Protect Your Equipment!

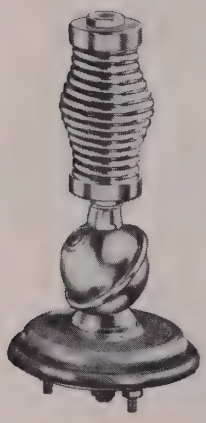
Know Your Performance!

Use A Reflectometer!

Model CM-52-2 dual units identical electrically to CM-52 but with remote indicator. Furnished with 10 feet cable and connector.

HAM NET $34.95

HUSTLER COMMERCIAL



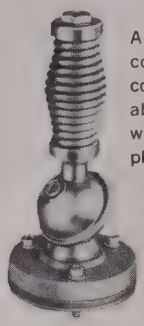
The commercial model has a 2" stainless steel ball mounted on a gray cycolac base, with cork pad and steel back-up plate. Mounting bolts are molded into base and do not show. Unequalled in appearance, strength and performance.

MODEL NTS-1
Complete base, ball and spring assembly.
Shpg. Wt. 3.0 lbs.
HAM NET . . . $19.50

MODEL NTS-3
Stainless steel spring with 3/8"-24 threads.
Shpg. Wt. 1.62 lbs.
HAM NET . . . $10.50

MODEL NTS-2
Base and ball assembly without spring.
Shpg. Wt. 1.35 lbs.
HAM NET . . $ 8.95

HUSTLER UNIVERSAL



An economy version of the Hustler commercial with stainless steel components. Stainless ball adjustable to 180°. Gray cycolac insulator with cork gasket and steel backup plate. Cadmium plated hardware.

MODEL SSM-1
Base ball and spring assembly.
Shpg. Wt. 2.53 lbs.
HAM NET . . . $15.95

MODEL SSM-2
Base and ball assembly.
Shpg. Wt. 1.3 lbs.
HAM NET . . . $8.50

MODEL SSM-3
Stainless steel spring with 3/8"-24 threads.
Shpg. Wt. 1.21 lbs.
HAM NET . . . $7.50

MODEL NCM-1
Same as SSM-1 except ball and spring are chrome plated steel.
Shpg. Wt. 2.5 lbs.
HAM NET . . . $11.75

MODEL NCM-2
Same as SSM-2 except ball is chrome plated.
Shpg. Wt. 1.3 lbs.
HAM NET . . . $5.95

MODEL NCM-3
Chrome plated spring.
Shpg. Wt. 1.21 lbs.
HAM NET . . . $ 3.50

HUSTLER PROFESSIONAL

MODEL C-29
Stainless steel spring with 3/8"-24 threads.
Shpg. Wt. 1.2 lbs.
HAM NET . . . $4.75

MODEL C-30
Same as C-29 except chrome plated steel.
Shpg. Wt. 1.2 lbs.
HAM NET . . . $2.95

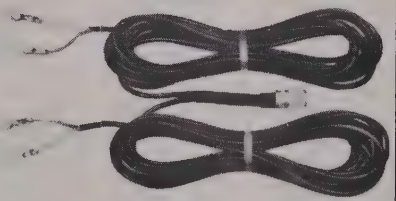
MODEL C-29-32
The Hustler Professional consists of a chrome plated 1½" die cast ZAMAK ball adjustable to 180°, and a stainless steel spring with 3/8"-24 threads. Gray cycolac base, cork pad and steel back up plate. Furnished complete with all mounting hardware.
Shpg. Wt. 2.05 lbs.
HAM NET . . . $6.75

MODEL C-30-32
Same as C-29-32 above except spring is chrome plated steel.
Shpg. Wt. 2.05 lbs.
HAM NET . . . $4.95

MODEL C-32
Base only, with 3/8"-24 threads. Complete hardware.
Shpg. Wt. .84 lbs.
HAM NET . . . $2.50

MODEL DTLS
The DTLS is a double talk harness, twenty feet long, with split lead termination and a PL-259 coax connector on other end. For use with any two antennas for phasing. Shpg. Wt. 1.65 lbs.

HAM NET $7.95



LO-PROFILE BASE MODEL MM-1
Ideal mount for use when the mounting angle exceeds 30°. Chrome-plated split ball swivels up to 180°. Base accepts PL-259 connector. Has 3/8"-24 thread in top.
Shpg. Wt. .64 lb.

HAM NET $3.50

RESONATOR SPRING MODEL RSS-2
Stainless steel spring designed for use between resonator and Hustler antenna mast. Spring absorbs shock when antenna strikes overhanging obstructions. Has 3/8"-24 thread. Shpg. Wt. .36 lb.

HAM NET $3.95

AMPHENOL Coax Cable with Factory installed Connectors are ideal for Amateur Radio, CB, or use with Monitor Receivers. All cables listed below use Low-Loss PolyFOAM type coax.

FOR MOBILE APPLICATIONS

#581-5820-2 20 feet RG-58U with PL-259 male coax connectors on both ends . . . . . $ 3.89

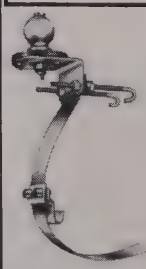
#581-5820 20 feet RG-58U with PL-259 one end and spade lugs on other end 3.40

FOR BASE STATION APPLICATIONS

#581-583 3 feet RG-58U with PL-259 male coax connectors on both ends. . . . . $ 2.70

#581-850 50 feet RG-8U with PL-259 male coax connectors on both ends. 11.20

#581-8100 100 feet RG-8U with PL-259 male coax connectors on both ends. 19.10



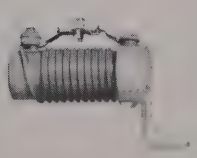
BUMPER MOUNTS MODEL BM-1
Stainless steel strap fits any shape bumper inconspicuously. Antenna base is the standard Hustler base, Model C-32. Hardware is cadmium plated. Shpg. Wt. 2.7 lbs.

HAM NET
$ 7.50

GUTTER CLIP MODEL GC-1
Plastic whip holder swivels on cadmium plated clamp. Holding angle always correct. Attaches easily and securely to gutter. Shpg. Wt. .06 lbs.

HAM NET $1.10

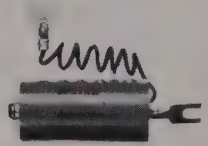
GENERATOR NOISE FILTER MODEL GF-3-30



For 6, 12, or 24 volt generators. Reduces noise (interference) caused by generator brushes. Rated at 30 Amps.
Shpg. Wt. .23 lbs.

HAM NET $2.75

VOLTAGE REGULATOR FILTER MODEL VR-30



Eliminates noise (interference) caused by points of the generator control relay in the voltage regulator. For use on 6-12-24-32 volt systems. Shpg. Wt. 1 lb.

HAM NET $2.50

New-Tronics HUSTLER HAM PRODUCTS

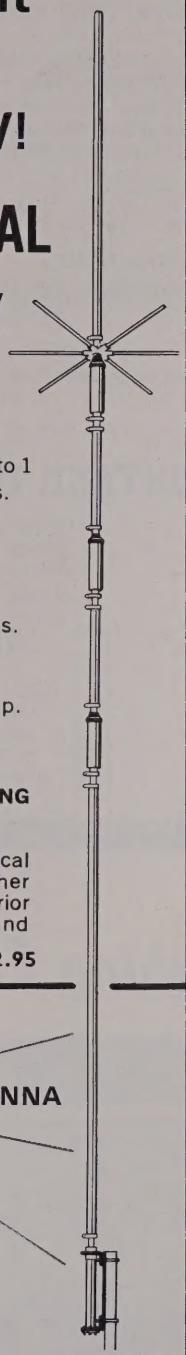
NOW—FOR THE FIRST TIME...

One adjustment covers both... Phone and CW!

Lowest SWR of any

FOUR BAND TRAP VERTICAL

MODEL 4-BTV

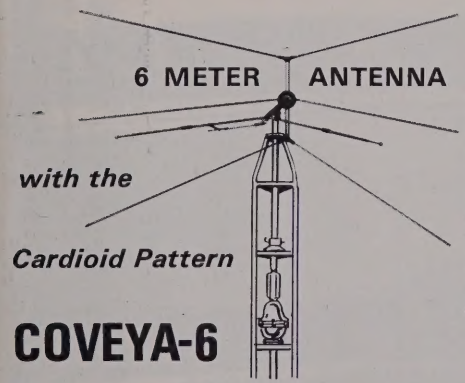


- Individually and precisely tuned, factory pre-set, traps!
- Lowest SWR at resonance!
- Bandwidth at its broadest! SWR 1.6 to 1 at band edges, 40 through 10 meters.
- Handles full legal power on SSB.
- Superior mechanical construction!
- No shorting out of loading coils to work higher bands.
- Ground mount with or without radials. Roof mount with radials.
- 75 meter operation with addition of the RM-75 or RM-75S resonator on top.
- Impedance: 50 ohms; length: 21'5"; weight: 15 lbs.

ONLY HUSTLER GIVES ONE SETTING FOR WHOLE BAND COVERAGE!

HUSTLER'S 4-BTV four band trap vertical was designed to outperform all other similar antennas. It provides superior 4 band operation both electrical and mechanical.

HAM NET $42.95



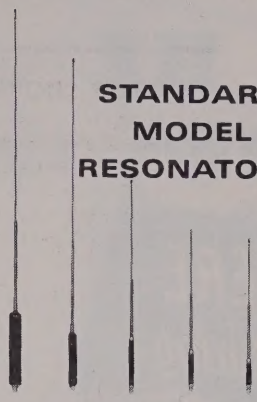
COVEYA-6

The ideal beam for round table QSOs. 10 DB gain over ½ wave dipole with 25 DB front to back ratio. SWR at resonance— 1:1 to 1. Band width, 1000 KC with SWR under 2 to 1. Gamma matched for 52 ohm coax feedline—adjustable for center frequency, 50 to 54 mc. Power handling capacity, 1 KW. Compact design permits mounting with ordinary hardware and rotators. Longest element—59". All hardware, castings, and tubing iridited, treated aluminum.

Model COV-6 **HAM NET $36.95**

NOW... More Consistent Communications, Greater Signal, More Uniform Pattern.. TWO Hustlers phased with DOUBLE TALK harness!

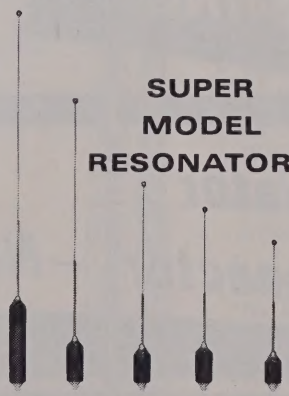
STANDARD MODEL RESONATORS



RM-10	10 METER RES.	$ 7.95
RM-15	15 METER RES.	$ 8.95
RM-20	20 METER RES.	$ 9.95
RM-40	40 METER RES.	$11.95
RM-75	75 METER RES.	$13.95

400 WATTS PEP.

SUPER MODEL RESONATORS



RM-10S	10 METER RES.	$11.50
RM-15S	15 METER RES.	$13.50
RM-20S	20 METER RES.	$15.50
RM-40S	40 METER RES.	$19.50
RM-75S	75 METER RES.	$24.50

2 KW PEP.

6 AND 2 METERS — COWL AND FENDER MOUNTS

Tunable for 6 and 2 meters with low SWR across band. Stainless steel adjustable tuning rod. Antenna opens to 44", collapses to 22". Base has 30° vertical adjust and mounts in 1" hole. Supplied with 5' coax and PL-259 connector. **Model HF-62** **HAM NET $11.95**

Model HF-2
Same as HF-62 but with ⅜-24 stud to fit standard mobile mount. **HAM NET $ 9.50**

®DOUBLE-TALK Antennas

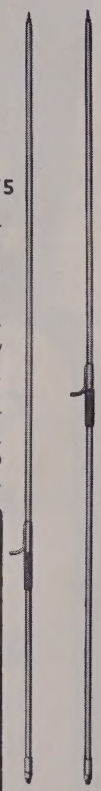
You get top signal reports—consistent contacts. That's why Hustler is the number one choice! And only Hustler has 50 ohm nominal base impedance, quick band change, broad band width, adjustable tip rod resonators, and exclusive 90° vertical plane and 360° horizontal swivel tip over mast with years of proven performance.

MASTS FOR DECK OR BUMPER MOUNT

Model MO-1 **HAM NET $10.75**
54" Mast, folds at 15" above base, swivels 360° for deck or fender mount.

Model MO-2 **HAM NET $10.95**
54" mast, folds at 27" above base, swivels 360° for bumper mount.

The foldover, heat treated, ½" aluminum mast permits quick and easy interchange of resonators. The mast can be folded over for entering garages or carports. Mast has a ⅜"-24 base thread to fit any standard mobile mount.



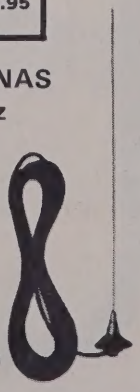
Stainless Steel WHIPS

Made of 17-7 PH taper ground stainless steel with heavy duty, cadmium plated ⅜"-24 male thread base.

Model SW-60R	60"	**HAM NET $4.75**
Model SW-96R	96"	**HAM NET $6.50**
Model SW-102R	102"	**HAM NET $6.75**
Model SW-108R	108"	**HAM NET $6.95**

ROOF TOP ANTENNAS 140 TO 500 MHz

New—lowest of all—low profile base offers easiest installation. Solid stainless steel radiator. Model UHT-1 mounts in ¾" hole. No soldering. Complete with 15 foot coax. Supplied with cutting chart. **HAM NET $5.25**



CD-40-75 Cliff Dweller 80 & 40m Remotely Tuned Loaded Dipole... $179.95

IT'S HUSTLER AGAIN! The HUSTLER II

Not to replace the standard Hustler but a mobile antenna designed especially for the ham who has everything . . . EXCEPT . . . permission to drill holes in the family car . . . tools . . . time . . . rents a car . . . or wants to avoid complications. The HUSTLER II is easy to install, takes less time than a fast QSO and is ready for operation without drilling, soldering or wire trimming.

AMATEUR HF
MOBILE ANTENNA
10-15-20 METERS

FIRST TIME ANYWHERE
a complete package featuring
- **NO DRILLING!**
- **NO SOLDERING!**
- **NO WIRE TRIMMING!**

The HUSTLER II is a combination base load, telescoping radiator and top mounted capacity hat resulting in a substantial reduction in overall height and wind loading. Mounting is easy. Just attach the heavy duty trunk lip mount to the rear or side edge of your trunk with the tool supplied. All cable connections are factory installed and the unique New-Tronics "break-cable" assembly makes cable installation through the car a pleasure. While performance is not quite equal to the standard Hustler with center loading and longer radiator, nevertheless, excellent results and reasonable bandwidth can be expected with the HUSTLER II. Really, the *only* answer for mobile operations when you cannot install the best . . . the original HUSTLER.

SPECIFICATIONS

- Power Rating: 500 watts PEP, 250 watts CW
- SWR at resonance: 1:1.1
- Feed impedance: 50 ohms nominal
- Approximate Overall Height: 40"
- Bandwidth for 2 to 1 or better SWR,
  - 20 meters 150 KHz
  - 15 meters 225 KHz
  - 10 meters 500 KHz

HUSTLER II

Antenna complete, less resonator, heavy duty trunk lip mount with 17' RG-58U and PL-259 connector.

User Net **$17.95**

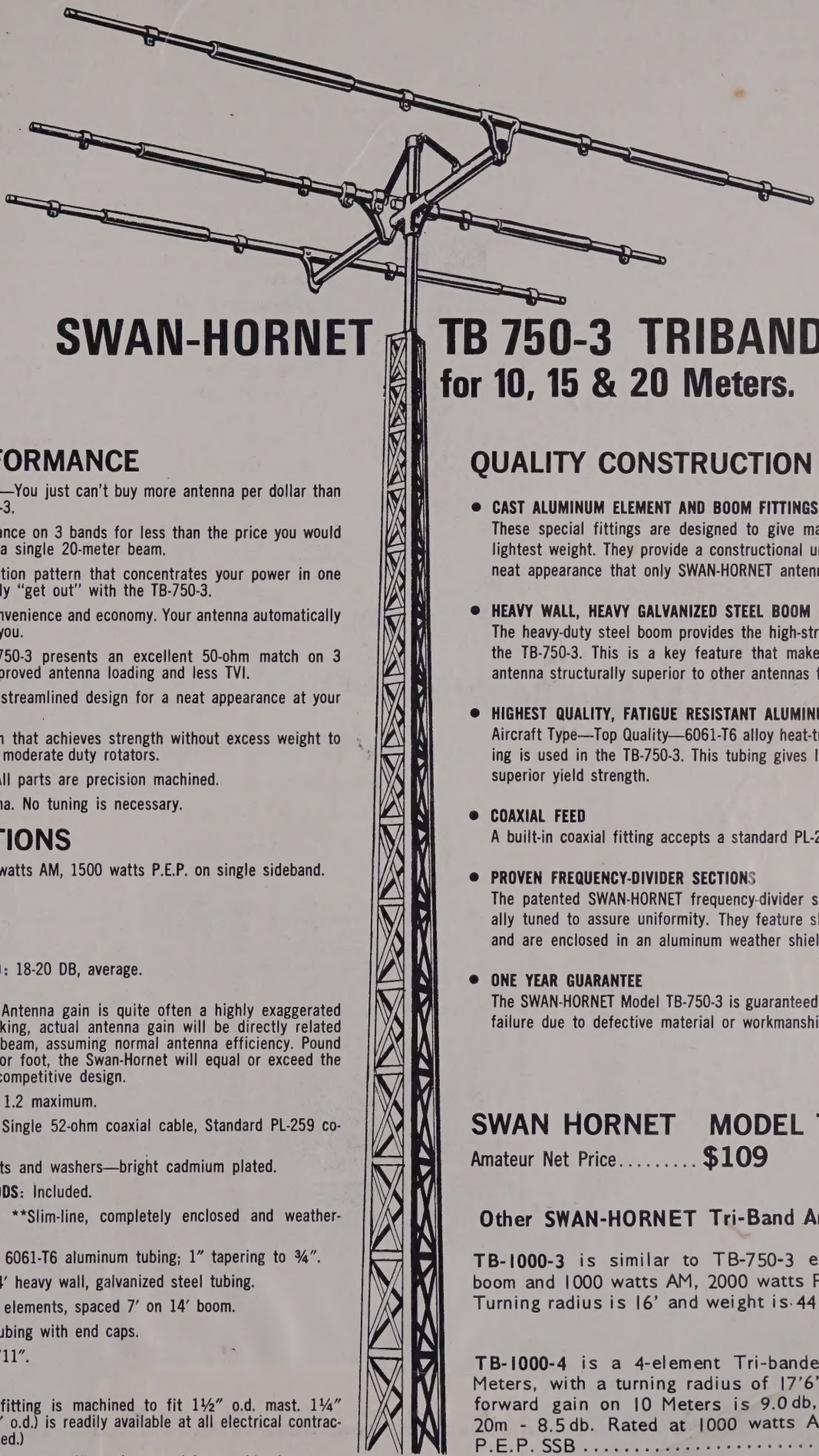
RESONATORS

Model RB-20
20 meter resonator
$8.95
USER NET

Model RB-15
15 meter resonator
$8.95
USER NET

Model RB-10
10 meter resonator
$8.95
USER NET

From Antenna Radiator to Transciever connector —Nothing Else to Buy!



SWAN-HORNET TB 750-3 TRIBAND BEAM
for 10, 15 & 20 Meters.

HIGH PERFORMANCE

TALK ABOUT $ VALUE—You just can't buy more antenna per dollar than SWAN-HORNET TB-750-3.

- Top-notch performance on 3 bands for less than the price you would expect to pay for a single 20-meter beam.
- A directional radiation pattern that concentrates your power in one direction. You really "get out" with the TB-750-3.
- Single feed line convenience and economy. Your antenna automatically changes bands for you.
- **LOW VSWR**—The 750-3 presents an excellent 50-ohm match on 3 bands. You get improved antenna loading and less TVI.
- Compact size and streamlined design for a neat appearance at your QTH.
- Strong construction that achieves strength without excess weight to permit the use of moderate duty rotators.
- Easy installation. All parts are precision machined.
- A pre-tuned antenna. No tuning is necessary.

SPECIFICATIONS

POWER RATING: 750 watts AM, 1500 watts P.E.P. on single sideband.

RESONANCE:
10 m—28.750
15 m—21.350
20 m—14.250

FRONT-TO-BACK RATIO: 18-20 DB, average.

FORWARD GAIN:
8 DB average. Note: Antenna gain is quite often a highly exaggerated claim. Generally speaking, actual antenna gain will be directly related to the length of the beam, assuming normal antenna efficiency. Pound for pound, and foot for foot, the Swan-Hornet will equal or exceed the forward gain of any competitive design.

SWR AT RESONANCE: 1.2 maximum.

TRANSMISSION LINE: Single 52-ohm coaxial cable, Standard PL-259 coaxial connector.

HARDWARE: Bolts, nuts and washers—bright cadmium plated.

OVER-HEAD BRACE RODS: Included.

FREQUENCY-DIVIDERS: **Slim-line, completely enclosed and weather-sealed.

ELEMENTS: Seamless, 6061-T6 aluminum tubing; 1" tapering to ¾".

BOOM: 1½" o.d. x 14' heavy wall, galvanized steel tubing.

ELEMENT SPACING: 3 elements, spaced 7' on 14' boom.

ELEMENT TIPS: ¾" tubing with end caps.

TURNING RADIUS: 14'11".

WEIGHT: 37 lbs.

MAST: Mast-to-boom fitting is machined to fit 1½" o.d. mast. 1¼" E.M.T. (measures 1½" o.d.) is readily available at all electrical contractors. (Mast not included.)

FITTINGS: Cast aluminum alloy. Heavy-duty precision machined.

**patented

QUALITY CONSTRUCTION

- **CAST ALUMINUM ELEMENT AND BOOM FITTINGS**
  These special fittings are designed to give maximum strength and lightest weight. They provide a constructional unity for strength and neat appearance that only SWAN-HORNET antennas have.
- **HEAVY WALL, HEAVY GALVANIZED STEEL BOOM**
  The heavy-duty steel boom provides the high-strength "backbone" of the TB-750-3. This is a key feature that makes the SWAN-HORNET antenna structurally superior to other antennas that cost much more.
- **HIGHEST QUALITY, FATIGUE RESISTANT ALUMINUM TUBING**
  Aircraft Type—Top Quality—6061-T6 alloy heat-treated aluminum tubing is used in the TB-750-3. This tubing gives less element sag and superior yield strength.
- **COAXIAL FEED**
  A built-in coaxial fitting accepts a standard PL-259 coaxial fitting.
- **PROVEN FREQUENCY-DIVIDER SECTIONS**
  The patented SWAN-HORNET frequency-divider sections are individually tuned to assure uniformity. They feature slim profile and are enclosed in an aluminum weather shield.
- **ONE YEAR GUARANTEE**
  The SWAN-HORNET Model TB-750-3 is guaranteed for one year against failure due to defective material or workmanship.

SWAN HORNET MODEL TB-750-3

Amateur Net Price..... **$109**

Other SWAN-HORNET Tri-Band Antennas

TB-1000-3 is similar to TB-750-3 except has 16' boom and 1000 watts AM, 2000 watts P.E.P. on SSB. Turning radius is 16' and weight is 44 lbs... $129.00

TB-1000-4 is a 4-element Tri-bander for 10-15-20 Meters, with a turning radius of 17'6". Approxmiate forward gain on 10 Meters is 9.0 db, 15m - 8.5 db, 20m - 8.5 db. Rated at 1000 watts AM, 2000 watts P.E.P. SSB $159.00

LOOK at your low Monthly Payment
AFTER JUST $5.00 DOWN

REVOLVING CHARGE PAYMENT CALCULATOR

Minimum monthly payment is based on original principal balance to be financed or new balance in the case of add-ons.

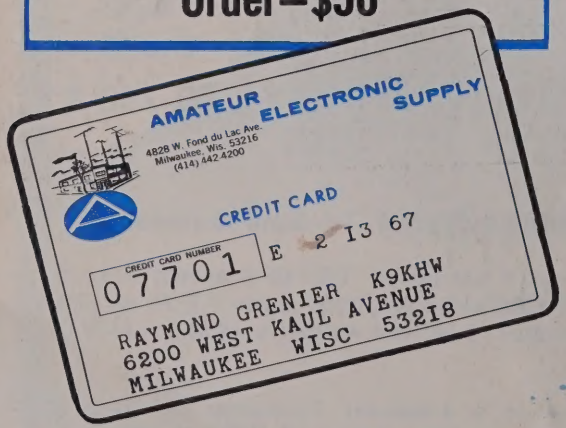
Balance	Minimum Monthly Payment
Up to $300.00	$10
$300.01 to 340.00	11
340.01 to 370.00	12
370.01 to 400.00	13
400.01 to 430.00	14
430.01 to 460.00	15
460.01 to 490.00	16
490.01 to 520.00	17
520.01 to 550.00	18
550.01 to 580.00	19
580.01 to 610.00	20
610.01 to 640.00	21
640.01 to 670.00	22
670.01 to 700.00	23
700.01 to 730.00	24
730.01 to 760.00	25
760.01 to 790.00	26
790.01 to 850.00	28
850.01 to 910.00	30
910.01 to 970.00	32

For full explanation of credit terms
SEE Page 3

Minimum initial REVOLVING CHARGE Order—$100

Minimum Monthly Payment—$10

Minimum ADD-ON Order—$50



After your first Revolving Charge order has been shipped, you will receive an Attractive Embossed Plastic Credit Card — which identifies you as a preferred credit customer.

SAVE $50

Most major pieces of Ham or CB equipment shown in this catalog offer a BONUS, if purchased at the Regular Price and WITHOUT TRADE-IN. The amount of the no-trade BONUS may be applied toward the purchase of any other merchandise in the catalog (such as antennas, microphones, crystals, companion power supplies, accessories, etc.). The amount of the no-trade BONUSES offered ranges from $5.00 to $50.00, and is indicated by the letters A, B, C, and D.

(See sample from the catalog, below.)

SWAN

SWAN 260 Cygnet 80-10m AC/DC (Bonus D) $435.00
SWAN 270 Deluxe Cygnet ..... (Bonus D) 525.00
SWAN 350C 80-10m Transceiver .. (Bonus D) 420.00
SWAN 500C 80-10m — Deluxe .... (Bonus D) 565.00

A indicates a $ 5 BONUS
B indicates a $10 BONUS
C indicates a $25 BONUS
D indicates a $50 BONUS

Simply show the amount of the no-trade BONUS as a credit on Line 2 of the Order Blank. If you purchase more than one item qualifying for a BONUS (no trade-in) — add the BONUSES and show the total amount as a credit on Line 2 of the Order Blank.

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